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EDITOR:
FRANK BURR TIBBALS, M. D.

COLLABORATORS:
AUGUSTUS WRIGHT IVES, M. D. HENRY JASPER HARTZ, M. D.
JOSEPH SILL, M. D. DON M. CAMPBELL, M. D.

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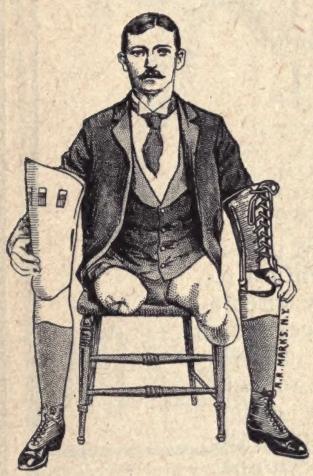

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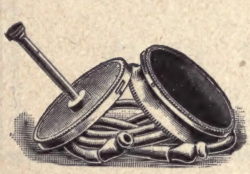

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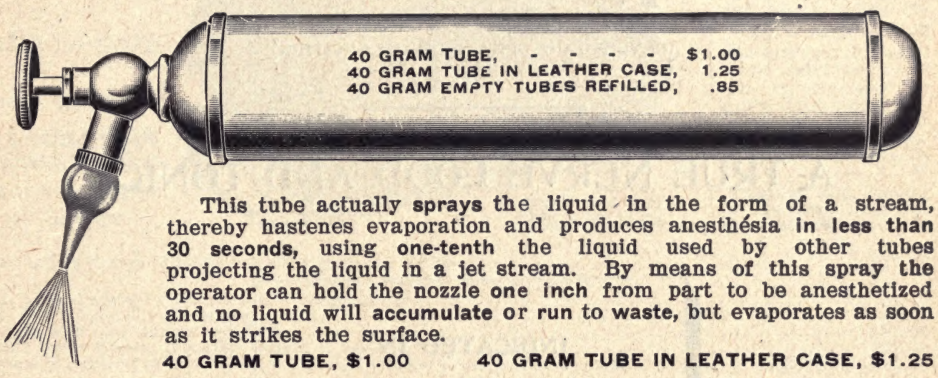

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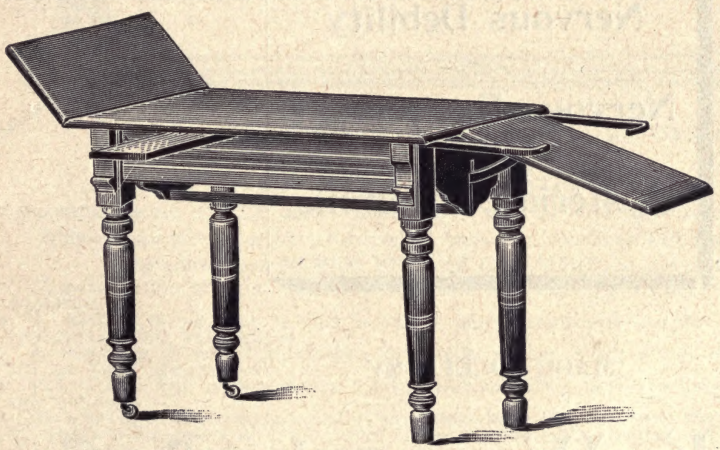

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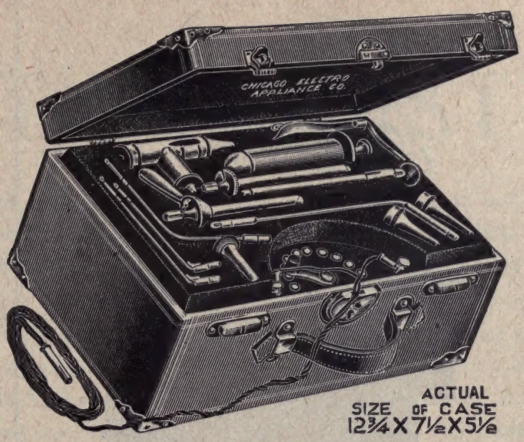

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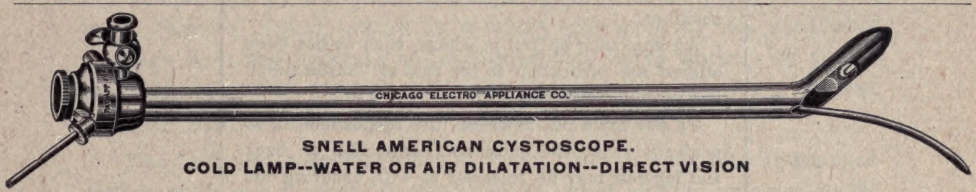

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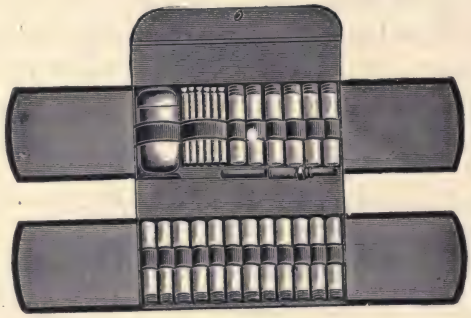

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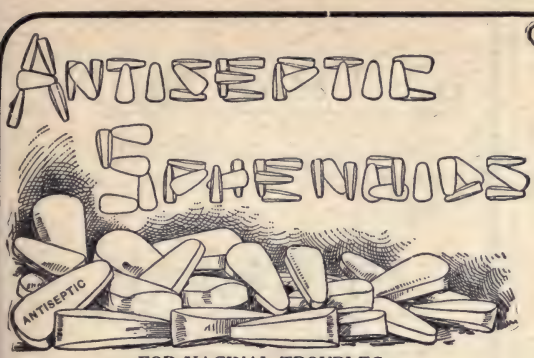

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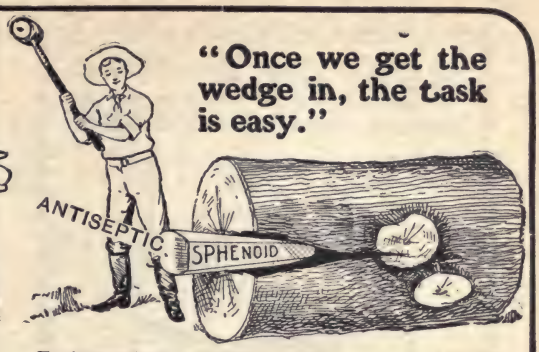

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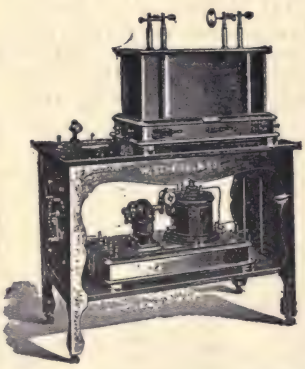

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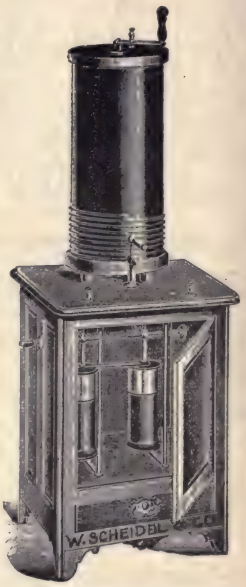

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THE DETROIT MEDICAL JOURNAL.

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PATHOLOGY OF PROSTATIC HYPERTROPHY.*

By MAX BALLIN, M. D.,
Detroit, Mich.

Anatomy.

The normal prostate is usually described as a chestnut-shaped or cone-shaped body, situated with its base upward toward the bladder, apex downward resting against the posterior layer of the triangular ligament. The prostate is pierced by the urethra running from its base towards the apex, and by the ejaculatory ducts. These ducts pass forward from the seminal vesicle and form two grooves on the lower or rectal surface of the prostate. The part of the prostate between these two grooves is called the posterior commissure or isthmus, and connects posteriorly the so-called lateral lobes, the main bodies of the prostate. These lateral lobes are in front of the urethra, connected by the anterior commissure, which is much thinner than the posterior one.

Microscopically, the gland is composed of a dense fibrous capsule which surrounds the whole prostate and sends a fibrous network into its interior. The network contains glands of composed racemose type surrounded by unstriped, irregularly arranged muscles. The glandular ducts open into the prostatic urethra. The glands often contain, in later life, concretions, so-called prostatic bodies. The prostatic urethra is about one inch long and contains on the middle of its base, the veru montanum, a crest-like elevation into which the ejaculatory ducts open. On the side of the crest the prostatic glands empty by twelve to twenty openings. In front of the two ejaculatory ducts a blind pocket goes into the isthmus; this is the prostatic utricle.

The principal surgical anatomical points are: The prostate is surrounded by a dense fibrous fascia which is more or less loosely connected with the gland proper so that in many cases the gland can be shelled out from the capsule. Far more intimate is the relation between the prostate and the prostatic urethra. The ejaculatory and the prostatic ducts form close connections between the prostate and the mucous membrane of the prostatic urethra. In fact, removal of the middle lobe is impossible without opening the urethra. The distance between the prostate and the perineum is smaller than the distance between the prostate and the upper part of the symphysis. To reach the prostate from the perineum we have to cut through skin, subcutaneous tissue, rectourethral muscle, levator ani, triangular ligament and prostatic capsule. To reach the prostate by the suprapubic route, we incise in the usual way between the recti muscles, open the anterior wall of the bladder and finally tear or cut its posterior wall. The posterior surface of the prostate is close to the rectum, so that injuries to the rectum in perineal prostatectomy are by no means uncommon.

*Read before the Wayne County Medical Society, Sept. 26, 1904.
Detroit, Mich., November 15, 1904.

Injury to the peritoneum in this operation is rare, as the recto-vesical pouch is well above the base of the prostate, though accidents of this kind have also happened. The upper and anterior aspect of the prostate is surrounded by a loose facia with the prostatic plexus of veins. These veins are often torn in approaching the prostate by the supra-pubic route. The apex of the prostate is left free of this plexus; in a perineal operation the danger of hemorrhage is therefore less than in the supra-pubic.

Physiology.

As to the physiology of the prostate, I will only mention that the prostate has to be considered as one of the sexual organs and not of the urinary organs. The secretion of the prostatic glands dilutes the seminal fluid and seems to have a certain influence on the mobility of the spermatozoa. Excision of the middle lobe of the prostate is always followed by impotence as it removes the ejaculatory ducts and many of the numerous nervous plexus which surround the prostatic capsule. This is a very important point worth considering as a sequel of prostatectomy, especially if the operation has to be performed on younger men. For this reason modern tendencies in prostatectomy are, if possible, to save the important isthmus of the prostate.

Pathology.

In the pathology of the prostatic gland, the prostatic hypertrophy takes the foremost place. This ailment occurs mostly at the age of fifty to sixty years—a few cases are related in younger men. The disease is very common; to quote Thompson's figures, 34 per cent. of all men at the age of sixty have enlarged prostate, and of these almost half suffer from the symptoms usually attributed to enlarged prostate.

The etiology of the condition is not yet clear. Guyon attributes it to arterio-sclerotic changes and considers it only a part of similar changes in bladder, kidney and the whole circulatory system. Modern investigations have shown, however, that hypertrophy of the prostate very frequently exists without arterio-sclerosis of the prostatic or even of the other vessels. Others believe that the hypertrophy of the prostate is analogous to the formation of fibro-myoma in the uterus, but the formation of real fibroids in the prostate is the exceptional kind of prostatic enlargement.

Ciechanowsky[1] (Krakau) recently said in a very scholarly paper, that "hypertrophy of the prostate is caused by a chronic inflammatory process" and thinks that "this chronic inflammation is caused mainly by the gonococcus." Against this, Rowsing[2], of Copenhagen, showed that of 140 patients with symptoms of prostatic enlargement only 40 had had gonorrhœa. The etiology is, therefore, subject to further investigation.

The enlargement of the prostate is in 80 per cent. of all cases general; that is, every lobe enlarges in size. This generally enlarged prostate grows mostly toward the interior of the bladder, and surrounds the internal orifice of the urethra like a horse-collar. The enlarged gland often shows asymmetrical projecting masses. This kind of prostate often attains a great size; it may weigh up to four ounces (2-3 of an ounce is the average weight of the prostate). Characteristic of this kind of enlargement is that the enlarged masses are very little adherent to the prostatic capsule and may easily be shelled out.

Next to the generally enlarged prostate, we have the enlargement of one or both of the lateral lobes, without en-

1. Mitteilungen aus den Geenzgebieten der Chirurgie und Medicin, 1900. Vol. 7.
2. Archiv fuer klinische Chirurgie, 1904. Vol. 74, Part 4.

largement of the isthmus; also this kind consists mostly of large growths similar to the first kind.

Quite different from these two kinds of prostatic enlargement is the formation of a middle lobe. This is an enlargement of the isthmus, the posterior commissure projecting into the bladder. The projection may be small, (bar-like) or pedunculated (valve-like). On account of its location growing from backward over the internal orifice of the urethra, it obstructs the bladder outlet, often far more than the huge growth of the generally enlarged type.

A fourth kind of prostatic change should be considered in this chapter; that is, the hard, fibrous prostate. Here the gland is very little or not all hypertrophied, but consists of dense fibrous tissue and is very hard. Analogous to changes in other organs, I would like to call it a cirrhotic prostate. In cases of this kind we have a contraction of the neck of the bladder, causing the same complex of symptoms as in true hypertrophy of the prostate. These cirrhotic prostates are, in my opinion, the most unfavorable for surgical treatment, enucleation being nearly impossible on account of the dense fibrous adhesions to capsule, urethra and bladder.

We have seen that the hypertrophic prostate grows mostly upward toward the bladder. Downward the dense fibroids of the triangular ligament prevent expansion. This rising of the prostate up into the bladder is necessarily followed by an elevation of the internal urethral orifice, which normally is at the deepest point of the bladder. This elevation of the urethral orifice leads to the formation of a pouch (cul-de-sac or bas-fonds). The pouch gradually becomes dilated by the urine retained there on account of the obstruction on the urinary outlet. It is this bas-fonds in which residual urine is first formed; it is here that the retained urine becomes most easily infected and it is in this pouch that stone formation follows the alkaline disintegeration of urine.

Further changes in the bladder follow hypertrophy of the prostate. The bladder becomes dilated, thickened and in some places thinned. The cavity of the bladder is in most cases enlarged. I saw in one of my cases a condition in which the bladder reached far above the umbilicus. In other cases it seems to me, cases where inflammatory processes have existed for a long period, and especially in cases of the small, hard prostate, the bladder is contracted; for instance in another case I operated upon I could not inject four drachms of water into the bladder. In all these cases the muscular elements of the bladder wall are lessened and replaced by connective tissue. The interior of the bladder becomes uneven, trabeculae and pouches form. It is remarkable that in spite of these changes in the bladder wall, restitution of the vesical function is often complete after the removal of the prostatic obstruction.

If the obstruction to the urinary flow and the inflammatory changes of the bladder have existed for some time, dilation of ureter and pelvis of the kidneys, hydronephrosis and pyelonephrosis with stone formation in the kidneys are often secondary complications of hypertrophy of the prostate.

The prostatic urethra is always lengthened in consequence of the increased size of the prostate. The more the prostate projects into the bladder, the further we have to introduce a catheter to obtain urine. The curve of the prostatic urethra is also lengthened and has a lesser radius than when normal; for this condition we often need catheters with an especially long curve. The projecting lobes of the prostate sometimes cause a tortuous course of the prostatic urethra. The lu-

men is always dilated in hypertrophy of the prostate.

Microscopically we distinguish an adenomatous and a fibrous kind; both may be diffuse, or localized. In the localized adenomatous form we often find the formation of real adenomatous tumors with a distinct capsule. In fibrous prostates all the glandular elements are replaced by connective tissue.

Symptoms.

Symptoms of hypertrophied prostate are: Increased frequency of urination caused by congestion of the prostate and mainly by the disability of emptying the bladder. The urine is voided in a small and slow stream without propulsion. Dribbling of urine in these cases is rarely caused by true incontinence, but mostly by overflow of the full bladder. It is very important to know this symptom, that frequent urinating and even dribbling can come from an over-filled bladder. The over-distended bladder forces continuously, or at frequent intervals, a few drops over the prostatic obstruction, just enough to equalize the amount of urine newly added from the kidneys. This dribbling can be compared with the permanent diarrhœa in cancer of the rectum. Also here the fecal masses gather above the obstructing cancer and frequently force small amounts of fecal matter along the tumor, causing distressing diarrhœa without ever relieving the rectum. In other cases the frequent urination may be aggravated by cystitis, stones, etc. Painful tenesmus often accompanies the dysuria. After inflammatory changes have supervened we have all the symptoms of cystitis, stone in bladder, epididymitis, nephritis, etc.

Examination of Patient.

If a patient above middle age gives us a record of the symptoms just mentioned, we should examine him in the following way:

1. Examination of general nutrition, heart and blood-vessels will give valuable suggestion as to the power of resistance; atheromatous changes of arteries, great waste of adipose tissue and a color very peculiar to these patients with chronic urinary poisoning are signs of grave importance.

2. By external inspection, palpation and percussion of abdomen we will notice sometimes the greatly dilated bladder. Swollen testicles (orchitis) are proof that inflammatory changes have set in.

3. Digital examination by the rectum. With the finger we can easily feel the large hypertrophied lateral lobes and can get a fair idea of size, shape and consistency of the prostate. If we have to deal with an isolated hypertrophy of the middle lobe, a vesical bar, or a hard fibrous prostate, we may not feel any hypertrophic parts from the rectum, but in these cases we often feel the vesical pouch (bas-fond) as a fluctuating mass.

4. The next step in the examination is the searching for residual urine. For this purpose we let the patient urinate, noticing at the same time the force and strength of the stream, and measure the amount of the spontaneously voided urine. Then, if possible to introduce, we pass a soft catheter, note how far we have to pass the catheter to obtain urine. The length of the catheter introduced permits a conclusion as to the lengthening of the prostatic urethra. The amount of urine withdrawn after spontaneous micturition is the so-called residual urine. The quantity should be measured accurately (it may vary from one to more than forty ounces).

Every case should be examined this way: The amount of residual urine corresponds to the dilation of the bladder. After an operation for prostatic hypertrophy we can judge the result of the operation by the amount of residual

urine; in an ideal result we should not have any residual urine.

Combined examination of the prostate by the finger in rectum after introduction of a steel sound into the bladder will allow conclusions as to the size of the prostate, the elevation of the urethral orifice and the depth of the vesical pouch. The peak of the sound is turned backward toward the rectum, the examining finger in the rectum tries to reach the point of the instrument, which can be easily done in a normal prostate but is often impossible in great prostatic growths with deep bas-fonds.

The metal instrument in the bladder will also tell us the shape and curvature of the prostatic urethra and the presence of stone in the bladder.

Especial attention should be paid to chemical and microscopical examination of the urine. Serious changes in the kidneys as indicated by albumin, low specific gravity, pus, etc., should contraindicate operation. Indeed, a great many fatal cases of operations on the prostate are due to post-operative renal insufficiency. Preparatory treatment by lavage of bladder, urotropin, etc., may be beneficial before operation.

The use of the cystoscope in hypertrophic prostate is often very difficult, the tortuous and lengthened course of the prostatic urethra often prevent the introduction of the instrument. If we succeed finally in getting the instrument in place, hemorrhage from the irritated mucous membrane will darken the field of vision, though it must be said that in suitable cases there is nothing more valuable than a cystoscopic examination. The cystoscope will show us the kind of hypertrophy we have before us, if a middle lobe is present, if both lateral lobes are hypertrophied or only one, the condition of the wall of the bladder, the presence of vesical pouches, stones, etc. I believe that cystoscopic examination should precede at least every attempt to use the Bottini cautery, as the cystoscope is the only means to tell us surely where and how deep to cut with the galvanocautery.

By all these methods of examining we are well able to diagnose the condition of prostate bladder or kidneys, we can see if operation is advisable or contra-indicated and we will also learn by these diagnostic means which of the much disputed different methods is the most suitable for every individual case.

271 Woodward Avenue.

SYMPTOMS OF PROSTATIC HYPERTROPHY AND SOME REMARKS ON TREATMENT BY PERINEAL OPERATION.

By FREDERICK W. ROBBINS, A. M., M. D.
Detroit, Mich.

The symptoms caused by prostatic hypertrophy have long been understood, but the questions involved in the radical treatment of this affection, to replace symptomatic palliation, have during the past 10 years been the subject of earnest thought and honest endeavor. The symptoms depend upon mechanical obstruction and local congestion or inflammation.

Many patients with enlarged prostates live and finally die without ever having had symptoms of obstruction. These are cases in which the hypertrophy, confined to the lateral lobes, extends downward toward the rectum and does not raise the vesico-urethral orifice above the bladder floor.

On the other hand, symptoms of obstruction may be present from causes en-

tirely foreign to prostatic conditions; as where the bladder has been over-dilated and paralyzed as a result of stricture of the urethra, or when an intra-vesical growth obstructs the urethral orifice or destroys the rythmical contraction of the detrusor muscles, or when tabes or other central nerve disease has partially or completely paralyzed the bladder.

A desire to urinate more often than usual by night or day is one of the first symptoms of prostatic hypertrophy, and then follows pain in the hypogastric, sacral and lumbar regions; also in penis, testes and scrotum; but these symptoms may be due to prostatic congestion from any cause.

Difficulty in starting the urine, loss of the normal parabolic curve of the urinary stream, dribbling at the end of urination, bladder irritability, sometimes extreme, retention of urine due to spasm of compressor urethrae muscle or congestion of prostatic urethra; without mentioning symptoms due to late pathologic conditions, all point to, but are not pathognomonic of, prostatic hypertrophy.

Although anxious not to restate anything which may have been said by others in this discussion, at the risk of so doing, I shall mention, as having a bearing on treatment, that which Keys impresses and many other writers ignore, namely, contracture of the vesical sphincter with hypertrophy of its muscular fibers. This condition secondary to chronic inflammation of the prostatic urethra, together with congestion of the mucous membrane of the uvulae vesicae, may cause obstruction to urination like that of the median bar.

In discussing treatment of prostatic hypertrophy it will be understood that there is such a thing as palliative treatment even in this 20th century. Many patients will not submit to operation until pain and discomfort have become unbearable. Many authorities advise palliation so long as danger signals can not be observed. If the physician leans too strongly to the side of conservatism, he may delay advising operation until great dangers can be removed only by opera- be operated upon or not. During the past ten years years the mortality following prostatic operations has markedly decreased until the doctor is no longer justified in holding the view that only in rare cases will it be proper to operate. He may indeed often give great relief to even severe symptoms by relieving the congestion but there are many times when obstruction and its contingent dangers can only be removed by operation; and nowhere have I seen the indications so compactly stated as in a recent article by John B. Murphy. He says:

Prostatectomy is indicated when the enlargements are pathological, that is, sufficient to prevent urination or to cause a large residual retention.

2nd: Painful and frequent urination.

3rd: As a cure for catheter life.

4th: As a cure for secondary cystitis.

5th: For relief of pressure on rectum.

6th: Painful and continual priapism of the old.

What today is the operation for the relief of patients suffering from prostatic hypertrophy? To my mind there is here no question to discuss. There is a place for the supra-pubic and also for the perineal operation, while in some cases, the Bottini galvano-cautery, or the Chetwood modification of the same is indicated. All these operations are for the purpose of removing the obstruction and no one of them can be employed with equal advantage in all cases. A middle lobe should be removed by supra-pubic prostatectomy, as also some lateral lobes where they grow upward, pressing high into the bladder. Up to date, the mortality of the galvano-cautery operation is less than that of any prostatectomy, but by far the larger number of cases call for

removal of the organ, and reports show the much safer operation to be that by the perineal route. I have not mentioned castration, vasectomy or any of those procedures having for their object the indirect contraction of the hypertrophied glands. They are all as dangerous to life as the operations mentioned. They undoubtedly in some cases remove all symptoms. I had one such case where a man died of bronchitis several years after I had done a double castration. During this time he had thrown away his catheter and lived symptomatically cured, but the results are very uncertain and I do not know of any one who now advises any one of these as an operation of choice.

All those in this country who have been very prominent in advocacy of the Bottini operation are now limiting its use to certain well defined conditions, the two most important being the presence of an inter-lobular obstructive bar and to cases in which the mortality risk would be too great, were a prostatectomy performed.

It is not necessary here to speak at length of the technique of the Bottini operation. Many of you have done it or seen it done, and the instruments and method of application have been demonstarted before you several times. If the cautery blade is not drawn too far through the tissues, the operation is a safe one; but if too short a cut is made, the desired result may not be accomplished and the operation must be repeated. The dangers from sepsis seem to be greater after the Bottini than after perineal or supra-pubic prostatectomy. On the other hand, according to Watson, shock and post-operative pulmonary complications are most frequent after prostatectomy. Hemorrhage is probably the chief factor in the production of shock, and the anæsthetic next. These dangers are largely eliminated in the Bottini operation.

The latest statistics, especially those published by Young, Murphy, Goodfellow, Alboran and Parker Syms seem to show that perineal prostatectomy can be performed with a very small mortality; indeed so low is this, that the probability of several years' additional life in a reasonably good subject is much greater to the patient operated on than to the one condemned to catheter life. Young and Murphy have each reported over fifty prostatectomies without a death and several others nearly as good results.

Whatever else such statistics may mean, they certainly do show that perineal prostatectomy is not in itself a dangerous operation, but it is not a cure-all, for Guiteras has reported a series of one hundred and fifty-three prostatectomies with eleven per cent. failures. Such a result is to be expected if all broken-down catheter habitués are to be operated on. It cannot be expected that a patient long tolerant of catheter life will be benefitted by removal of the obstruction; the bladder has lost its contractile power and any operation will be a failure. There are these cases that should not be submitted to operation, because, being reasonably comfortable as they are, one must in all honesty give a poor prognosis regarding benefits to be expected; on the other hand, a vigorous man of not too great age, even when there be present a pyelonephritis, may, by operation, be restored to comfort and reasonably good health. I would, therefore, suggest that great care be taken in every case to make a careful diagnosis, that the operative cases be separated from the non-operative, and that the best operation be selected for the individual case.

A perineal prostatectomy has the advantage over the supra-pubic in affording better drainage in those cases where the bladder is opened, also greater facility in

packing the wound to prevent hemorrhage where it occurs. This complication is seldom fatal, nevertheless it causes at times considerable uneasiness.

There are a few instances in which preservation of the seminal ducts is important. This is not done in the supra-pubic operation but we have reason to believe this is accomplished by the perineal method in a fair proportion of cases.

The older method of doing a perineal prostatectomy which, as I understand it, is the method of Parker Syms and Goodfellow, is to make a perineal section, then from within the prostatic urethra find the line of clearage between the external capsule and capsule proper and if possible, shell out the gland as a horse-chestnut from its shell, not entering the bladder; but the external capsule may have disappeared from that portion of the gland projecting into the bladder, and the mucous membrane be so thin that the bladder is unavoidably opened. If so, little harm is done.

It is an important aid in this procedure to pull the gland down within reach of the operating finger and this is done by means of one of several retractors—devised for the purpose—the rubber bag of Syms, the segment of a ring of Lydston, the prostatic sound of Guiteras, or the double-bladed retractor of Young. Murphy for this purpose employs small toothed retractors to be caught into the gland itself, while others find that they can bring the gland down by means of the fore-finger passed through the rectum and hooked over the gland. All except the last two are passed into the bladder through an opening in the membranous urethra.

The operation so successful in the hands of Young appeals to the surgeon by reason of its being ideal from an anatomical standpoint. The field of operation is all the time exposed to view. He makes the inverted V-or Y-shaped incision through skin and fat, with retractors, spreads the wound, finds and cuts with scissors the recto-prostatic tendon, thus allowing the rectum to fall back from the prostate out of harm's way. The prostatic retractor is then introduced through a button-hole in the membranous urethra, prostrate pulled down and incisions made into it on either side of the median line, and the lobes enucleated, leaving the base of urethra containing the seminal ducts intact. Stones in the bladder, as also an enlarged middle lobe, are dealt with separately.

The operation of Murphy is very like this except that he makes a transverse incision into the prostate below the urethra and after freeing the lateral lobes, incises and removes the base of the prostatic urethra, not attempting to save seminal and prostatic ducts; then sutures the cut edges of prostatic urethra together over a catheter, thus getting rid of a dilated pouch that often occurs in the prostatic urethra back of an enlarged middle lobe.

The reports of a hundred operations by Murphy and Young without an operative death, show that the operation as perfected, is much less dangerous than has been supposed in the past, and should be advised by those having such sufferers in charge more often than is generally done. Drainage is so much more perfect after perineal than after the supra-pubic operation that I prefer it, except in special cases. Nor can I see any advantage from the combined operation except where conditions within the bladder make it desirable to enter it through a large supra-pubic opening.

73 Cass Street.

Cleveland has opened its city hospital for the treatment of the drug and liquor habits. There is abundance of clinical material for one in Detroit.

RECENT PROGRESS IN ROENTGEN RAY TECHNIQUE.*

By PRESTON M. HICKEY, M. D.,
Detroit, Mich.

Mr. President and Members of the Wayne County Medical Society:—

It is true in many of the avenues of human activity that the impossibilities of yesterday are the achievements of today, that the ideal of the present is the commonplace of the morrow. Experimentation and concentration of thought solve many problems. In the short time which has elapsed since Professor Roentgen announced his discoveries, which were the cumulation of patient work of many investigators on the behavior of electric discharges in rarefied gases, the technique of the use of the Roentgen ray has constantly improved. The simple pear-shaped tube of Sir Wm. Crooke has been displaced by the focus tube of Jackson. The old-fashioned hammer make and break has been succeeded by the mercury jet and the electrolytic interrupter. After the ray was first introduced to the profession the imperfections of the coils and tubes necessitated long exposures, which oftentimes caused an annoying dermatitis or not infrequently extensive necrotic processes on the patient. Improvements tending to shorten the time of exposure have practically eliminated, in careful hands, all danger of X-ray burns when the patient is exposed for diagnostic purposes. The danger of the X-ray burn has been transferred from the patient to the operator. The accumulative effect of the ray has produced some most annoying and distressing effects upon its enthusiastic followers. Severe burns of the face, pigmentation of the cheeks, grave disturbances of vision, troublesome rheumatic pains, severe dermatitis and ulceration of the fingers and hand, have often been the lot of operators who have been careless in exposing themslves to its influnce. Frequently the lesions of the hand have been followed by epitheliomata which have necessitated amputation of one or more fingers. The thoughtless and frequent use of the fluoroscope is responsible for many of these unfortunate cases. The holding of the fluoroscope in the unprotected hand near the excited tube and the use of the hand as a test object to determine the vacuum of the tube are the two most frequent causes.

The remedies for this trouble which will eliminate the danger to the operator are, first,—To enclose the tube in some material which is impervious to the ray, allowing it to escape only on the lower surfaces; second, for the operator to remain in a metal box with a heavy window during the exposure; and third, to eliminate as far as practicable the use of the fluoroscope. The safest way for the operator is to have a lead box constructed within which he can manipulate the switch of the machine, and from which he can view the operation of the tube through a heavy glass window. The glass makers have furnished us a quality of glass which, while transparent to the ordinary rays of light, contains enough lead to make very opaque to the Roentgen ray. In considering the matter of X-ray burns or so-called white gangrene our attention has been transferred from the patient to the operator. The use of the fluoroscope should be minimized, and should be confined to cases where it is of advantage.

If we pass a powerful secondary current through a tube, of the type shown in Fig. 1, making connections so that the

*Read before the Surgical Section of the Wayne County Medical Society, Oct. 24, 1904.

negative charge enters the wire connected with the cup-shaped cathode, we will have impingeing on the platinum target the cathode rays which generate the X-rays. These X-rays are thrown off in a manner indicated by the radiating lines of the diagram. It has been found that there are secondary rays given off from the glass walls of the tube in a much less quantity. These rays have been called "parastic rays" by the French. If we take a picture through a thin part of the body, such as the hand, the exposure will

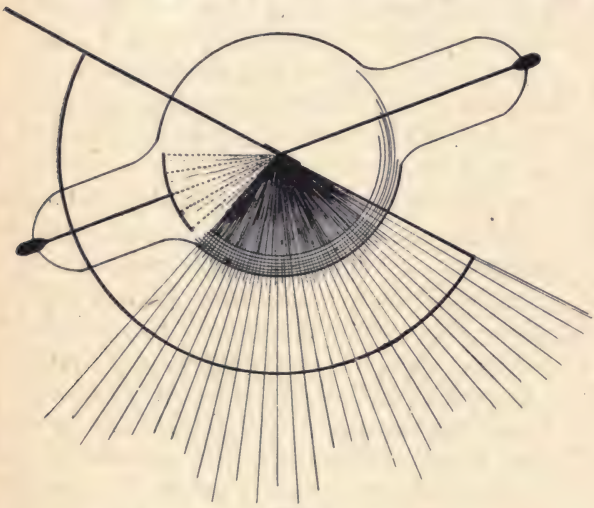

FIG. 1

be so short that the direct rays from the target will be the only ones which practically effect the photographic plate. If, however, the rays are sent through a heavier part of the body, such as the hip, we will have the photographic plate underneath affected not only by the direct rays from the target, but also by the secondary rays from the walls of the tube. If we expose the body to the Roentgen ray, we find that the body in turn becomes radio-active. The problem then in radiography is to use only those rays which are necessary to take the picture and to minimize the radio-activity of the body. This has been secured by the use of diaphragms, of which there are several types. In Fig. 2 we notice the ordinary plate diaphragm, which consists of a sheet of lead with a hole directly under the tube which shuts off part of the vagrant rays. As some of these rays, however, escape at the sides, a tubular diaphragm has been suggested—as shown in Fig. 3. This consists of a lead cylinder having a small opening at the top with a free opening at the lower extremity. As can be seen at a glance, this cuts off completely all but the direct rays from the target.

Criticism has often been directed against the use of the ray, founded upon

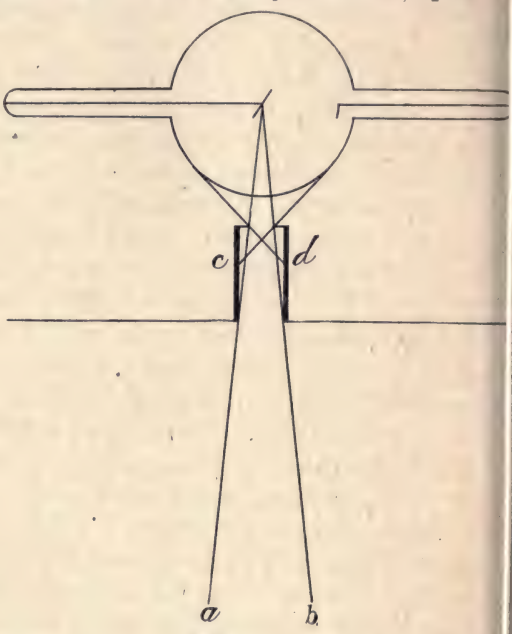

FIG. 2

the fact that the rays proceed only in direct lines. According to this physical law it follows that unless the target of the tube is placed exactly over the part to be skiagraphed distortion will follow. This distortion will be proportionate to the angle at which the tube is adjusted. For a long time radiographers have been accustomed to use a plumb-line in order to place the target as accurately as possible over the part to be skiagraphed. However, it is difficult to always adjust the tube with a plumb-line. In some cases the lack of definition is caused by the tendency of the ordinary tube-holder to

vibrate. It is evident that if the tube moves at all during the exposure the edges of the picture will be blurred. One of the great problems in radiography is the difficulty of detecting the presence of renal calculi. The difficulties attendant upon this problem are those caused by the greater thickness of the part to be radiographed with the slight density of the object sought. The movements of the parts during respiration also add to the difficulty. Any means brought forth which will reduce the thickness of the part and which will tend to restrict the

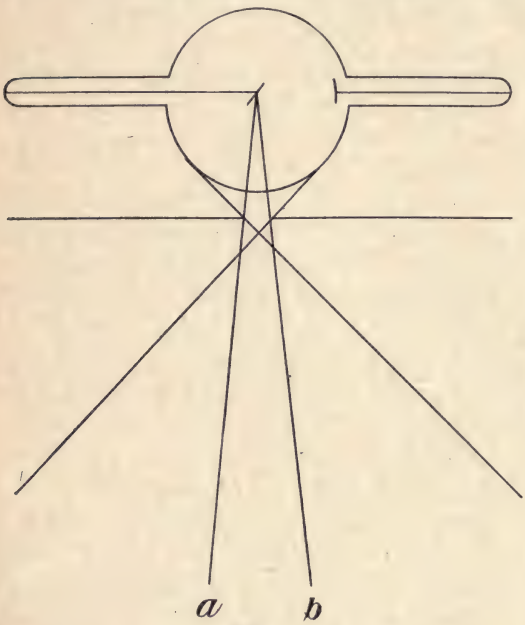

FIG. 3

respiratory movements will, of course, be a most valuable adjuvant. The cutting off of the vagrant rays, the accurate centering of the tube, and the compression of the part with its consequent immobilization are best secured by what is now known as the compression diaphragm, perfected by Dr. Albers-Schönberg, which I have the pleasure of showing you this evening. This consists, as you see, of a stout board from which rise three metal arms adjustable for height. These arms carry a metallic frame which supports the lead tube. This lead tube is adjustable in various directions and is so arranged that it can be pressed, by means of the wooden handle, into the tissue desired. The Roentgen ray glass tube instead of being held by a tube holder, is mounted by two wooden support upon a smaller board which accurately fits the lead tube. When once the X-ray tube is adjusted and centered over the diaphragm tube, it can be removed and replaced with a certainty that the centering will remain the same. This centering of the tube dispenses with all question of distortion, as in all skiagraphs made with the aid of this piece of apparatus the target of the tube corresponds to the center of the circle on the photographic plate. The pressing of the lead tube, whose lower edge is provided with a hard rubber ring, firmly against the part to be skiagraphed (interposing, if necessary, a thick piece of felt for the comfort of the patient) produces an immobility of the part absolutely essential for fine detail. Movement of the part exposed is as fatal to good definition as the movement of the head in an ordinary daylight picture. The suppression of the vagrant rays by the lead tube permits of the radiographing of heavier parts of the body with a greater increase in definition. Another problem which has confronted the radiographer is the estimation of the vacuum of the tube. In making exposures the radiographer oftentimes is between Scylla and Charybdis. If he use a vacuum higher than is suitable for the part selected, there is loss in contrast. If he use a vacuum lower than will penetrate the part desired, the plate will be under-exposed. If he use his hand to determine the vacuum of the tube by the fluoroscope, he subjects himself to the danger of X-ray dermatitis. An instrument has been devised for determining the vacuum of the tube consisting of a fluoroscope with metal discs of different thickness, the penetration of which re-

veals the vacuum of the tube. This is also provided with several safe-guards so that it can be used without risk to the radiographer.

It has been theoretically urged that the use of such a small circle necessitates many exposures. However, any part of the body except the chest can be thoroughly investigated in two or three plates. An advantage of this instrument is that it is not necessary to use any plate larger than an 8x10, which materially diminishes the cost of exposures. This alone enables one to save considerable in the cost of plates during a year's work. Another advantage of this instrument is that it standardizes the distance between the target and the body, as the distance from the target to the lead tube, plus the length of the lead tube, would always be the same. There would simply be the variation in the thickness of the part examined.

Another device which has recently been brought forward is a handy piece of apparatus for measuring of the amount of current consumed by the tube. It has been found that the quantity of X-rays given off from the tube is proportionate to the milliampères of the secondary discharge sent through the tube. A moment's reflection shows that we have in this way a means of measuring the efficiency of any good type of apparatus. Another point of advantage that this measuring device has is that the dosage of X-ray in treatment can be accurately standardized.

In making skiagraphs which involve the question of displacement of fragments of bone or the relation of foreign bodies to the tissue, the objection to the single skiagraph is that it projects in one plane all the parts depicted. In other words, in looking at a skiagraph of a bullet in the arm it is often times difficult to tell from the one plate whether the foreign body is below or above the osseous structure. This difficulty is overcome in two ways; first, by taking two views, one at a right angle to the other; second, by the use of the X-ray stereoscope. Formerly it was necessary with the stereoscope to take two separate plates under the proper conditions and to combine them by means of the Wheatstone stereoscope. This consists of two mirrors and is ordinarily a very cumbersome piece of apparatus. If we make the two exposures upon a single plate, the first and second exposure being side by side, we have the advantage of keeping the picture together. Then if we combine them by a simple means we can dispense with the clumsy Wheatstone stereoscope. Such a contrivance has been brought out by Mr. Caldwell, and consists of two reflecting prisms suitably mounted.

These prisms are so arranged that their angle can be adjusted to the eyes of the observer. This compact little instrument, about the size of an opera glass, has materially simplified the process of X-ray stereoscopy. By its use we can determine in a single plate the antero-posterior dimensions of objects under observation.

The technique of treatment by the X-ray has also shown improvement. The tendency among the most experienced operators in the treatment of malignant diseases is to discard all shields, excepting those necessary for the protection of the hair or eyes. It has been found that superficial growths may be removed with the ray, but that if the area treated is limited by a lead shield recurrence may take place beyond the point treated where the shield was placed. The wave of enthusiasm which spread over the country when it was found that malignant growths could be affected by the ray has given place to careful selection of cases, and the experienced operator will no longer try to break down large growths if the system is not capable of eliminating the absorbed material. Another point in

the technique of treatment is the tendency to increase the distance between the tube and the patient. This permits of a greater number of exposures without the risk of an early dermatitis. If the tube is placed from 12 to 15 inches from the part under treatment, there will be a more equal penetration of the skin and the deeper parts with less risk of irritation to the cutaneous structures. This permits of a longer treatment of deep-seated growths. It has been satisfactorily proven by the numerous reports of cases from all parts of the world that cutaneous malignant disease is usually favorably influenced by the ray. If the technique can be extended so that similar results can be obtained in the more deep-seated lesions, the work of the enthusiastic followers of the Roentgen ray will not have been in vain.

32 Adams Avenue West.

URINARY CONDITIONS IN HYSTERIA; WITH A REPORT OF THREE CASES OF HYSTERICAL ANURIA.*

By HERBERT M. RICH, M. D.,
Detroit, Mich.

The anomalies of the urinary secretions constitute one of the most interesting groups of phenomena in the protean aspects of hysteria. It has long been known that in hysteria "one of the most inseparable symptoms is pale urine" (Sydenham), and the most generally accepted understanding of the term "hysterical urine" is undoubtedly a large quantity, pale in color, and deficient in solids. Gilles de la Tourette, and others, however, working under the direction of Charcot, showed that in ordinary hysteria the urine shows neither quantitive nor qualitive changes. In severe types there is a reduction in the urates and phosphates and in the total amount. This may be important in differentiating hysteria from epilepsy, an increase in the excretion of urinary solids being common after *grand mal.* The reduction in amount noted by this observer is, of course, contrary to the classical idea of hysterical urine.

On the other hand, pale urine in large quantities of low specific gravity is common after many crises not hysterical: In fever ending by crisis, in locomotor ataxia, epilepsy, migraine and chorea. It will also be found in some injuries to the central nervous system, tumors of the cerebellum, medulla or spinal cord; in meningitis, in the first stage of paresis, and in diabetes insipidus. It is, likewise, a matter of common knowledge that more rarely cases of genuine anuria are found in hysterics. So the conclusion seems inevitable that the term "hysterical urine" is misleading. The type of urine commonly known as hysterical would be more correctly termed "crucial urine;" and there is no consistent urinary condition in the varying clinical picture to which we apply the term hysteria.

The author believes, however, that in obscure cases, careful observation of the urinary solids may afford a valuable point in differential diagnosis.

Hysterical anuria is not common. Gordon in three years in La Saltpetrière with a legion of hysterias, saw only three anurias. This condition, however, is always serious, as the common sources of renal suppression, as acute nephritis, poisonings, thrombosis, etc., are all rapidly fatal unless promptly relieved, and according to Musser, hysterical suppression may lead to symptoms of uremic in-

*Read before the Wayne County Medical Society, Oct. 12, 1904.

toxication. Total suppression of the urine leads to death ordinarily in from ten to fourteen days, although Nathale recently reported a case in a man of 68 who died on the 27th day of absolute anuria. It naturally follows that it is always of the utmost importance to know the cause of a persistent anuria.

In making a diagnosis of hysteria, the first essential is, of course, to exclude true organic disease; but this is only negative, and to carry assurance, a diagnosis must present some positive points. Ordinary cases of hysteria are, of course, easily recognized; in them positive signs may be many. But in anomalous cases presenting few or no stigmata, every symptom is of value in the making of a correct diagnosis. In such cases the author believes that careful daily examination of the urine will reveal a condition pathognomonic of hysteria and that observation of the urinary solids may afford a point in differential diagnosis. This condition is the alternation of a watery urine with a concentrated urine within a short time and without a corresponding variation in the amount of fluid consumed or excreted by other channels. That is, with the patient in bed and the amount of water taken noted on the daily chart, there will be such a marked variation in the quantity and quality of urine secreted that it can not be explained on a physiological basis. In addition to these variations, it may be noted that the usual relations between the amount secreted and the specific gravity are not present. In normal kidney conditions one expects to find that as the quantity increases the specific gravity will decrease and *vice versa*; but in the condition here discussed, as will be shown by the charts, this relation is either not present or is inverted.

The following cases illustrate the condition which may occur clinically:

E. B., age 24, single, female. Mother died at 53 with arterio-sclerosis and interstitial nephritis. Family history otherwise negative. Patient extremely neurotic. Menses regular and normal. In spring (1900) had an attack of low fever with indigestion; reasonable recovery. In fall returned from country with extreme indigestion, foul intestines and acute nephritis (toxic). Nephritis cleared up, and with rest in bed and careful diet all became better. Then began periods of depression and insomnia and pains of an hysterical character. Separation from family was advised.

On admission, Nov. 25th, patient had persistent nausea and irritability of stomach, ejecting everything. Insomnia and neurasthenic abdominal pains and headaches of great severity. Urine, small quantity, frequently goes 24 to 48 hours without urination. Some casts, occasional trace of albumin. Sphygmograph tracing reveals no evidence of arterial degeneration. No stigmata of hysteria. Physicial examination negative except for great emaciation. This condition continued for some weeks with little variation and without anything in the way of a crisis.

Meanwhile the urine was showing the following interesting variations. Unless otherwise specified, the analysis was of a 24-hour specimen and made daily. The patient was in bed with a special nurse and hence under constant observation. Selected dates only have been given, to show the more striking variations:

Nov.	28,	Sp. G.	1.024
"	29,	" "	1.015
"	30,	" "	1.010
Dec.	1,	" "	1.008
"	2,	" "	1.016
"	3,	" "	1.024

On each of these days the amount passed in twenty-four hours was between 250—320 cc., and there was not more than a pint of variation in the amount of fluid ingested.

Dec. 9, Sp. G. 1.030—13 oz.—416 c.c.
" 10, " " 1.016—16 oz.—512 c.c.
" 11, " " 1.030—11 oz.—352 c.c.
" 15, " " 1.030—12 oz.—384 c.c.
" 16, " " 1.040—16 oz.—512 c.c.
" 19, " " 1.008— 5 oz.—160 c.c.
" 20, " " 1.020— 7 oz.—224 c.c.
" 21, " " 1.020—15 oz.—480 c.c.

These last three days illustrate an oft-repeated peculiarity. The usual relation of the daily amount and the specific gravity is exactly reversed. It will be noticed that the lowest specific gravity occurs on the day when the amount was smallest.

Jan. 3 to 7, 85 hours anuria.

Jan. 10 to 14, 6 oz.—192 c.c. in 100 hours, followed by 62 oz.—1984 c.c. in the next 12 hours.

Jan. 13,— 6 oz.— 192 c.c.— Sp. G. 1.020
" 14,—20 oz.— 640 c.c.— " " 1.008
" 15,—44 oz.—1408 c.c.— " " 1.003
" 16,— 2 oz.— 64 c.c.— " " 1.028

From 1:30 p. m., January 18, to 4:30 p. m., January 25—seven days and three hours—there was absolute anuria. Two nurses were assigned to the case, one of them being constantly in the room. On January 25, 7 oz. were passed, Sp.G. 1.028. During this time the patient complained of considerable dizziness, nausea, indefinite pains in abdomen. There was vomiting and hysterical syncope every day. While the patient was catheterized only once during this time,—no urine being found,—she was very thin and one could easily be sure that the bladder was not full.

Case 2. A. L., age 27, female, single, neurasthenic. Protracted period of great emotional disturbance, gastric neurosis, anorexia of extreme degree. Entered July 11, weighing 65 pounds; usual weight 130 pounds. Pain on light pressure, rigors and podalgia; severe mucous colitis. Later showed photophobia, reversal of color fields and other hysterical symptoms. No history of nephritis or urinary disturbance of any kind. In a lesser degree this case showed the variations in urinary solids exhibited by case one.

July 18,—55 oz.—1760 c.c.— Sp. G. 1.020
" 19,—44 oz.—1408 c.c.— " " 1.008
Aug. 1,—37 oz.—1184 c.c.— " " 1.008
" 2,—75 oz.—2528 c.c.— " " 1.004
" 3,—28 oz.— 896 c.c.— " " 1.016
" 19,—36 oz.—1132 c.c.— " " 1.016
" 20,—51 oz.—1632 c.c.— " " 1.016
S'pt 28,—32 oz.—1624 c.c.— " " 1.012
" 30,—58 oz.—1856 c.c.— " " 1.030

There was never actual anuria in this case.

These cases were in bed under constant observation and opportunities for deception were practically eliminated. In neither of the cases was there anything like a crisis, nor any variation in food, drink, or bowel movement at all capable of causing the variation noted in the urine. There was vomiting in both these cases, but no odor of urea was ever detected in the vomitus, although carefully sought for.

Permission has kindly been given me to refer to two other authentic and unpublished cases of hysterical anuria. One was in the practice of Dr. Frank Billings, of Chicago. The patient was a woman. A constant watch was kept over her, all vessels were removed from the room and the bed-clothing frequently examined. There was absolute anuria for twelve days.

The other case was in the practice of Dr. Henry B. Favill, and is especially interesting because it occurred in a child of eight years. She had for three months irregular habits of urination, the period of absolute anuria at one time extending over eleven days.

Is such a persistent idiopathic variation in the urine consistent with any pathological state other than that condition which we term hysteria? If pathognomic, does not this symptom deserve a

place among the stigmata of occasional occurrence?

This phase of hysteria furnishes illustration to Gower's remark that "there is altogether too strong a disposition to consider hysteria not only primarily but altogether as an affair of brain and will. That it is so originally there can be no doubt; but the secondary disturbances of the lower centers (e. g. the vaso-motor) may at times preponderate over that which can be recognized as the highest, and may be in some cases * * * * apparently independent in their occurrence." Another illustration of the apparent independence of spinal centers is furnished by Hallayer's observations of the deviation from the usual relations between the rectal and the axillary temperature in hysteria.

Charcot believed the tolerance of the body in the extreme cases of hysterical anuria to be due to supplementary excretion, that little food is retained, and the patient being at rest, tissue changes are slight. Anuria lasting a day or two is not unusual in very young infants, and has been ascribed to imperfect innervation.

A further observation of less importance, in connection with this subject, is its bearing on the explanation of the mechanism of the excretory walls of the kidney, indicating as it does the existence of separate nerves of control over the function of excretion. The old "filtration" theory, which still occupies considerable space in our text-books on physiology, would seem to be overthrown by the very existence of such a condition as hysterical anuria. It certainly does not seem possible that changes in blood pressure alone could account for the variations in the cases mentioned in this paper, for example, without symptoms of such changes of blood pressure being evident in other organs. We must believe that there is more direct nervous control of the kidney secretion than by means of the general vaso-motor control of the blood pressure.

References:—

1. American Journal of Surgery and Gynecology. 1900., xiii. p. 121.
2. Journal American Medical Assoc., 1900, p. 594.
3. Medical Record, 1900. p. 289.
4. Guisy: Progres Medical, 1898, vii.
5. Guisy: Proceedings Internat. Cong. Neurology and Psychiatry, 1897.
6. Gowers: Diseases of the Nervous System.
7. Osler: Practice of Medicine.
8. Musser: Medical Diagnosis.

502 Washington Arcade.

The long looked and hoped for union of the regular profession of New York State has been postponed for a year at least because of the objection of a few members of the N. Y. State Medical Association to the legality of the proposed union. This quibble looks from this distance like hair-splitting and it is much to be regretted that some way was not found to silence the dissenters to secure unanimous consent for the adoption of the new code of rules, regardless of any technical unconstitutionality, as in point of fact was done originally by the A. M. A. at the St. Paul meeting and by many state societies since.

Dr. Julius F. Henkel, of Detroit, major and surgeon of the First infantry, Michigan National Guard, has been appointed chairman of the executive committee for the reception and entertainment of the Association of Military Surgeons of the United States at its fourteenth annual convention, which will be held in Detroit next June. Drs. Vernon J. Hooper and John E. Mead have been named by Dr. Henkel as members of the committee.

Drs. Otto Toepel and Morgan Parker were nominated for coroner on the Republican ticket at the recent primaries, out of a field of forty-one candidates.

NOMENCLATURE OF THE VARIOUS AFFECTIONS OF THE MASTOID.*

By EMIL AMBERG, M. D.,
Detroit, Mich.

It would seem that clinical observation of patients suffering from what is generally called mastoiditis obliges us to discriminate between the various forms more than is usually done. This discrimination applies not only to the part affected, but also to the virulence of the disease. The pathologic conditions found in a temporal bone should, in my opinion, find a more exact expression in naming the affection so that it may more readily be expressed that the disease commonly called mastoiditis includes a number of affections. Not speaking of the complications which ensue outside of the temporal bone proper, and mentioning only the diseased conditions of the middle ear, we may speak of a tympanitis with a possible affection of its various parts, floor of the tympanum, ossicles, etc., of an epitympanitis, of an inflammation of the aditus ad antrum, of an antritis, of a mastoiditis and of combined forms, e. g., mastoiditis cum antrite, which should be differentiated against mastoiditis sine antrite, etc. Not only would the title indicate a distinct genus of a disease in so far as the localization and affection are concerned, but it would also serve to impress more readily types of the clinical picture. This is very important from the viewpoint of diagnosis as well as treatment, and also of possible complications.

In regard to the course of the disease, we usually find a division into the acute, subacute and chronic forms. It appears, however, that there exist not only two varieties of the acute form, but three, namely:

1. Those which take a rapid course, clearly showing alarming local and general symptoms, especially of a toxemic character, and which do not respond to palliative measures.

2. Those which take a somewhat more protracted course, extending over a period of one or several weeks, exhibiting plain local symptoms but which are not accompanied by intense pain nor by a grave affection of the whole system, and which, at least temporarily, respond to palliative measures.

3. Those which take a mild course.

The first type should be called **mastoiditis acutissima**; the second, **mastoiditis acuta**; and the third, **mastoiditis subacuta.**

By proposing these names I do not by any means suggest that surgical interference should be delayed in the latter instances.

270 Woodward Avenue.

*Written for the Detroit Medical Journal.

Dr. John S. Sweeney, of Chicago, who was sent abroad by the Iroquois Memorial Association for the purpose of inspecting European emergency hospitals, has returned to Chicago and reported on his observations. He was heartily in favor of the English ideas for hospital work, and it is probable that the Iroquois memorial hospital will be built along English lines.

Pennsylvania has taken active steps in the combat against tuberculosis by the formation of the White League, which started actual work on Aug. 1, by the formation of a temporary camp at Trout Run, near Bethlehem, where ten patients will be treated. The organization has a farm of 100 acres near Glen Summit, in Luzerne county, and lated on a permanent camp will be established here. The open-air treatment, in conjunction with high feeding, will be used.

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Surgery of the Prostate.

In perhaps no department of surgery has progress been more marked during the last decade than in the diseases of the prostate gland. The bane of masculine old age with its attendant difficulty of micturition, cystitis, and finally catheter life, has at last been robbed of its terrors by the comparative safety of surgical intervention. The discovery that the prostate can be enucleated or shelled out from its capsule without material injury to the bladder, urethra, seminal vescicles or rectum has made prostatic surgery possible. The operation in properly selected individuals is devoid of much shock, and the danger of hæmorrhage with the modern technique is slight. Sepsis is a danger which cannot be entirely eliminated because of the nature of the field of work, but may be minimized by the preliminary use of urinary antiseptics.

Not every case of enlarged prostate should be subjected to operation, but only those in which the obstruction to the urinary flow is sufficiently annoying or hazardous to justify resort to surgical measures. The trend of the future, however, will be we think toward earlier operation before the bladder, ureters and kidneys become permanently damaged.

The choice of operation appears to depend upon the experience and preference of the operator, although no route of approach is adapted to every case. The Bottini cautery operation always seemed to us an unsurgical procedure with no claim for its adoption other than the avoidance of general anaesthesia. The Bottini through a perineal incision is surgical and has certain advantages over a simple prostatotomy, or splitting of the gland. If the entire prostate is to be removed, the perineal operation is relatively freer from danger of shock and of sepsis, while the supra-pubic route better conserves the urethra and seminal vescicles and allows visual inspection of the field. The combined operation through bladder and perineum has certain advantages in some cases, especially where the gland is large, and is in the minds of many operators the technique of the future.

The Purchase of Confidence.

One of the first things that a sensible man in any walk of life does is to establish himself in the confidence of those with whom his activities brings him most in contact. Confidence is the first stone in the foundation of success; but, like the first stone in question it must have a solid resting-place, or it is well-nigh useless. Confidence in self, when based on thorough knowledge, begets the confidence of others; when it is ill-founded, or merely assumed, it is the greatest deterrent to the confidence of the world.

Instances of these somewhat trite and almost axiomatic statements are found hourly in the practice of medicine and in all that it implies and embraces. The waiting-room of the man in whom people have confidence is full of patients; his

hand and brain are busy in the work for which he is well equipped. But let that confidence be lost, let it even waver for a space, and the effects are as disastrous as pulling out a foundation would be. Nowhere in life does it fall to the lot of man to enjoy more fully and freely the confidence of mankind than does the physician. With the body, the soul is often laid bare and it devolves upon the man of medicine to heal more wounds that were ever to be found in the mere physical economy. Moreover, it is but fair to the profession as a whole to say that in the main the confidence given is every whit as much merited as it is full. There are black sheep in the profession, true enough; but we have heard of shepherds who strayed, and members of the other learned professions have been found furnishing statistics other than educational or moral.

To the peculiarly intimate relation between physician and patient is due a strong movement, still in its infancy, yet capable of crushing the twin serpents even as did the baby Hercules. We allude to the attitude of the men and the interests whose reason for existence is the medical profession and the practice of medicine.

There are evidences of this strong movement on every side, a sure sign of its novelty and its strength. Physicians are supplied with what they need of a quality unknown to earlier workers in the field and prepared under conditions undreamed of by the profession of a decade or two ago. The constant devising of mechanical aids has called forth men who are competent to follow out the suggestions of the profession, and the physician and patient of today have many and substantial advantages over their brothers of a former generation. The efforts of the manufacturers are actuated by a desire to gain the confidence of the profession, and the best efforts of men with enormous energy and capital are bent to this end.

The representatives of one drug firm in the east have expended a handsome fortune in tracking down an organized "ring" of counterfeiters. Their success entitles them to the heartiest congratulation. They have succeeded not only in putting a stop to a nefarious and unlawful practice, but they have by their energy and their evident sincerity gained for their product the confidence of the profession which they could scarcely have acquired by the mere use of money.

The establishment and maintenance of confidence are matters to which a physician can scarcely be said to devote too much attention of the right kind. Every hour of study, every opportunity grasped, every bit of proper equipment put to the right use is a stone in the wall of reputation, which a man may build as high or as low as he pleases. Confidence and credulity are in part the same thing, in that they are both based on faith; yet they stand wide apart. The modern physician is in contact with men among his patients who are his equals in education from an academic standpoint. They have had the advantages of university training, even as he has, and he must secure their confidence by fair and solid means.

To everyone in the practice of medicine, no matter how intimate or remote the relation, the watch-word must be: "Secure the confidence of those with whom you deal; once, secured, maintain it as you would your honor."

The Prevention and the Restriction of Typhoid Fever.

Editor of the Detroit Medical Journal:—

Dear Sir:—On pages 209-10 of your Journal for October is an interesting editorial on the prevention of typhoid fever. The closing question suggests the

thought that possibly a brief review of some phases of the work on this subject by the Michigan State Board of Health may be of interest to the medical profession. It is now twenty-five years since the board began systematically to teach the adult population of this State the best known measures for the prevention of typhoid fever. Although since that time much has been learned by sanitarians and by the medical profession relative to typhoid fever, enough was known at that time to prove of great use to the people for its prevention. This is evidenced by the fact that the statistics of the State Department show a lessening of the mortality from typhoid fever in Michigan from the same time of the beginning of the educational work by the State Board of Health—1879. Comparing the rate previous to 1879 with that after that date to and including the year 1896, the apparent average saving in the later period was about one hundred and seventy lives per year. Since 1896 the apparent saving has been greater, the average, for the years 1897-1903 inclusive, being about three hundred per year. My belief is that Michigan was the pioneer State in that work. I know of no other State or other board of health which undertook at so early a date to labor by systematically educational efforts for the *prevention* of typhoid fever.

The Michigan Board of Health was the first to collect evidence as to the effect of isolation and disinfection for the *restriction* of typhoid fever. Such evidence has been collected since 1890. About ten years ago some results of this work were presented to a meeting of representatives of State and other boards of health, and they seemed to be astonished that there should be a lessening of typhoid fever by those two measures. Within a few years other evidence has been accumulating, and, although at present it is being taught by the bureau of health of the German Empire, and by eminent investigators in this country that "typhoid fever is a contagious as well as an infectious disease," the first proof that the disease can be restricted by isolation and disinfection was developed by the contagious-disease statistics commenced fourteen years ago and published by the Michigan State Board of Health. I enclose herewith a copy of a diagram (Plate 1026) illustrating this point.

Very respectfully,

HENRY B. BAKER.

Lansing, Michigan, October 21, 1904.

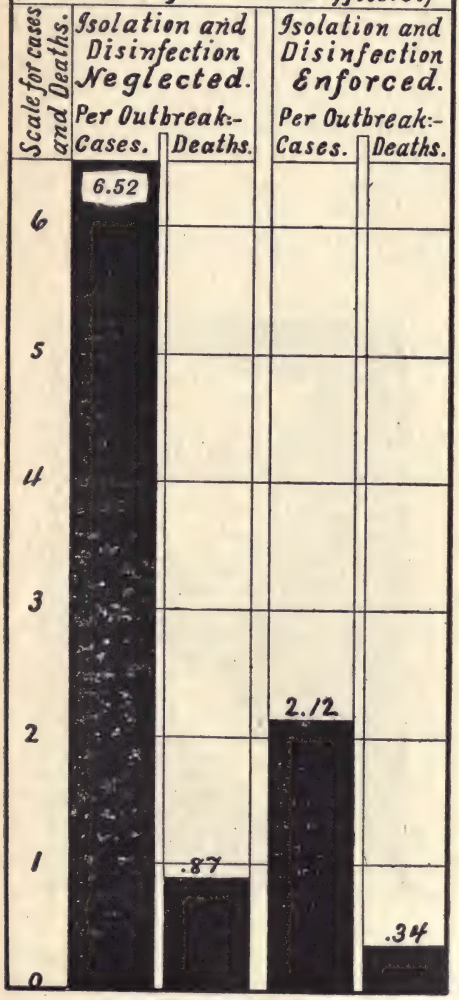
If isolation of patients and disinfection of excreta can reduce the number of cases two-thirds and the mortality nearly the same, typhoid can certainly be *restricted* in its spread. It can also be *prevented* to at least the same extent, if not absolutely, if State Health Boards be granted the power to enforce rural sanitation and to safeguard the water supply of all communities.

The profession in Michigan is now so well organized that it can ask with dignity and confidence for Sanitary legislation, and we hope to see the scope of Health Boards under the supervision of the State Board materially enlarged. We are glad that our State Board is a pioneer in the *restriction* of typhoid. Let its field be enlarged to include *prevention*.

The accompanying diagram graphically illustrates what was accomplished in those outbreaks of typhoid fever in Michigan during the nine years ending with 1898, where isolation and disinfection were enforced, compared with those outbreaks where isolation and disinfection were neglected. An average of six and fifty-two one-hundredths cases, with eighty seven one-hundredths of one death per outbreak has occurred in those cases where isolation and disinfection were not practiced, while an average of only two

ISOLATION AND DISINFECTION RESTRICT TYPHOID FEVER.

Typhoid fever in Michigan in the 9 years, 1890-98:- exhibiting the average numbers of cases and deaths per outbreak:- in all outbreaks in which Isolation and Disinfection were both Neglected; and in all outbreaks in which both were enforced. (Compiled in the office of the Secretary of the State Board of Health, from reports made by local Health Officers.)



[PLATE 1026.]

and twelve-hundredths cases with thirty-four-hundredths of one death per outbreak has resulted where isolation and disinfection were enforced. Diagrams prepared relative to years since 1898 show somewhat similar results. From this diagram it appears that in those outbreaks where the two measures, isolation and disinfection, were neglected the cases and deaths were nearly three times as many as in those outbreaks in which those two measures were enforced. The actual experience, thus systematically and carefully summarized, covers a period of time of over ten years, and is absolute proof that typhoid fever is a communicable disease which can be and actually has been restricted in Michigan by the measures recommended by the State Board of Health.

EDITORIAL NOTES.

The fourth Pan-American Medical Congress will convene in Panama in the first week of January next. This fact offers an ideal opportunity for a mid-winter trip. In addition to the interest which attaches to the meeting are the added attractions of an opportunity to see a portion of the world which is new to most medical men and of particular interest just at this time. The government of Panama has appropriated the sum of $25,000 for the scientific session and for the entertainment of visitors. The dates of the congress are from January 2 to 6, and the afternoons only will be devoted to the meetings, the mornings and evenings being given up to trips and to social functions. Present plans include a reception on the first day by President Amador, of the republic of Panama, and the formal opening of the congress in the evening. On the second day a trip to the Canal is planned in the morning, with

section meetings in the afternoon and a banquet in the evening; on the third day an excursion down the bay to the Taboga islands, for a Panama breakfast, scientific sessions in the afternoon, and a ball in the evening. On the fourth day there will be a trip to the U. S. army barracks in the morning, sessions in the afternoon, and the formal closing meeting in the evening. Following this, on the next day the plantation of the United Fruit Co. will be visited and on the same day those of the congress who desire to do so will leave for the meeting of the Public Health Association, the meetings of which will be held in Havana the following week. Communications from physicians in connection with the congress may be addressed to the following secretaries of the section: Drs. A. H. Doty, of New York, hygiene and quarantine; Judson Daland, of Philadelphia, medicine; R. Matas, of New Orleans, general surgery; Bert Ellis, of Los Angeles, eye; Hudson Makuen, of Philadelphia, throat; Frederick Jack, of Boston, ear; C. H. Hughes, of St. Louis, nervous diseases; Geo. Goodfellow, of San Francisco, military surgery; John Ridlon, of Chicago, orthopedic surgery; D. W. Montgomery, of San Francisco, dermatology; C. G. Kerley, of New York, pediatrics; Noble P. Barnes, of Washington, therapeutics; and Walter Chase, of Boston, pathology.

At the meeting of the International Congress of Military Surgeons held at St. Louis last month, officers were chosen for the coming year. Surgeon-General Walter Wyman, of Washington, D. C., formerly first vice-president of the association, was chosen president; Major Albert H. Briggs, of Buffalo, vice-president; Brig.Gen. Robert M. O'Reilly, of Washington, D. C., of the United States Army, second vice-president; Major James Evelyn Milcher, of Carlisle, Pa., belonging to the United States Volunteer Service, secretary, and Major Herbert A. Arnold, of Ardmore, Pa., attached to the National Guard of Pennsylvania, treasurer. The winners of the Enno Sanders prize essay contest were announced. The first prize was awarded to Lieut-Col. William Hill-Clime, of London, England, for the best paper on military surgery. The second prize was awarded to Lieut.-Col. Hathaway, of the Royal Volunteer Medical Corps of Ihause, India. The meeting place next year will be Detroit, Mich.

At the annual meeting of the Mississippi Valley Medical Association, held at Cincinnati, Ohio, on October 12 last, Dr. J. H. Carstens, of Detroit, was elected vice-president, together with Dr. E. P. Norbury, of Jacksonville, Ill. Other officers were elected as follows: President, Dr. Bransford Lewis, of St. Louis, Mo.; treasurer, Dr. S. C. Stanton, of Chicago, Ill.; secretary, Dr. H. E. Tuley, of Louisville, Ky.

J. H. CARSTENS, M. D.

NEW INSTRUMENTS AND DEVICES.

Mention of new instruments and devices in this department is entirely complimentary and articles illustrated are judged on their merits.

We invite manufacturers and physicians to send us matter suitable for publication under this head. A description of the device and an electrotype or half-tone with a base not greater than two and five-eights inches should be sent.

Always mention the price of the article in question.

The management cannot undertake to return cuts unless postage for same accompanies the letter with which they are sent.

To Our Readers—The Detroit Medical Journal publishes descriptions of such aids to the profession as it knows to be reliable and trustworthy. We shall be pleased to furnish information as to the articles mentioned, or the articles themselves, upon receipt of an inquiry.

Giant Eye Magnet.

The manufacturers of this magnet have combined in the form we illustrate great strength, perfect poise, ease of manipulation and absolute control of the magnetic field. The magnet alone weighs about sixty pounds and has a lifting power of approximately 400 pounds to the square inch. It measures ten inches in length from the tip to the rear end and is five and one-half inches in diameter. The crane weighs, with the magnet, considerably more than one hundred pounds, but it is mounted on swiveled, light-running castors and the whole device may be moved from place to place without any great effort. The magnet, in spite of its weight, is readily and safely raised or lowered, by the crank and gear arrangement shown in the illustration.

The magnet is swiveled so that it may be rotated in a complete circle and may be tilted to any angle desired. Its poise is sufficiently delicate so that little effort is required to move it to any desired position, and when this is once secured, it may be locked immovably. The chief advantage of this construction is that the patient may be laid on a couch or an operating table and the magnet adjusted to just the desired point; the accidental lowering of the magnet is impossible.

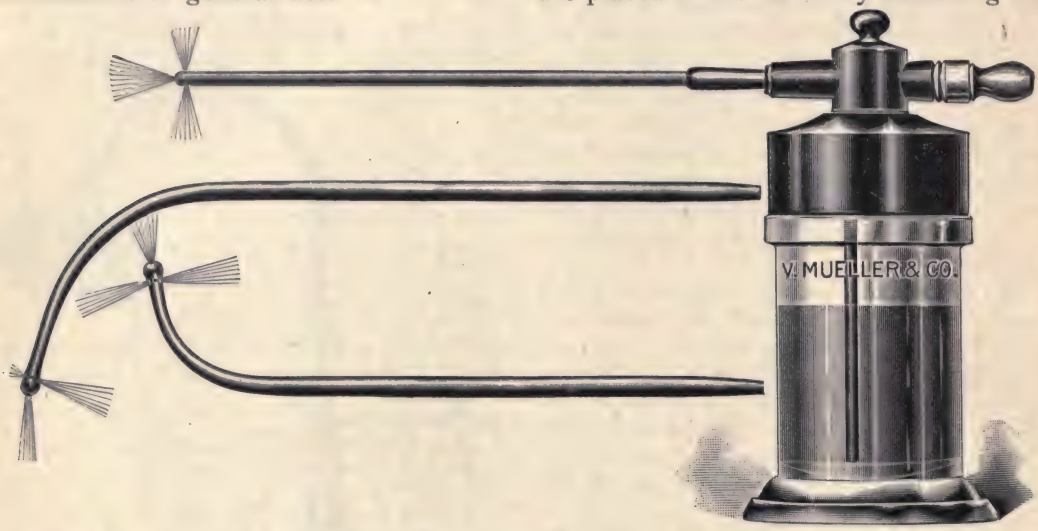
In order to keep the immense lifting

power of the magnet under perfect control, the manufacturers advise the use of a foot-rheostat, as by this means both hands of the operator are left free. The magnet and crane, with accessories, costs $85.00. The rheostat sells for $25.00.

Straight-Tube Spray.

Dr. G. F. Hawley, professor of Laryngology, Rhinology and Otology in the Chicago Clinical School, has designed this spray for the purpose of rendering the post-nasal space readily accessible to treatment in cases of catarrh affecting

this portion of the nasal cavity. His efforts in this direction have been the outcome of the difficulties he has experienced in treating post-nasal catarrh with the instruments in general use.

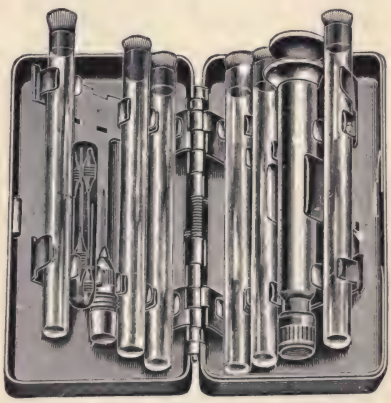


The straight tube is so constructed that it may be inserted through any nostril, however small, until it reaches the post-nasal space, where a medicament by means of a spray may be applied directly and forcibly against the entire diseased surface. The same attachment to the spray has been found by Dr. Hawley to be of great value in treating the larynx.

The cut shows the spray with three tips, the short, curved one being used also in treatment of the post-nasal space. With the three tips, the price is $1.50; with three tips and a bulb, the price is $1.75. The manufacturers also make a straight tip of silver, which is indestructible, for $1.00.

"Detmers" Aseptic Hypodermic Syringe.

The advantages of an all-metal syringe, which has no washers or packing to get out of order, and which may be boiled for hours without injury, must be patent. In the form illustrated we have such an instrument. The plunger is of uniform diameter along its entire length and works perfectly in the barrel without the aid of oil or grease of any kind. The needle and hub are separable, and tablets are placed in the barrel by detaching the hub from the latter. A tube containing six points is furnished with each complete syringe in the case, and extra points may be had at small cost when needed. The plunger is marked with rings to show



graduations, and these serve to prevent back-flow or escape of contents.

With an aluminum case, accommodating six tablet tubes, six extra needle points, wires, etc., the syringe sells for $2.50. Extra points, in tubes containing six, come at 35 cents.

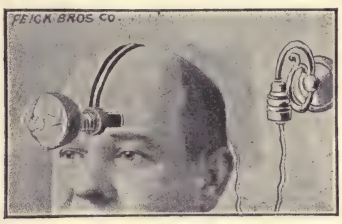
Infant's Weight Chart.

This chart, designed for family use by Dr. Herbert M. Rich, of Detroit, has great practical value to the family of the infant under observation, as well as to its physician, and is quite in line with modern ideas of rearing children along somewhat definite hygienic lines. Provision is made for systematic weighing during the first eighteen months of an infant's life, in the first six months of which two weighings a week are made. Following this, for the period of one year, one weighing a week is taken. The chart bears a curve, plotted from observations on 10,000 healthy children, and taken from Holt's Diseases of Infancy and Childhood. By comparison between the curve of the weight of the infant under observation and the normal curve, any deviation may be noted at once and reported to the attending physician.

Directions for use of the chart are printed with it. The whole is attractively bound, and retails for 25 cents.

New Headlight.

Several advantages are claimed for this aid to the examiner, which was devised by Dr. Chevilier Q. Jackson. It is certainly light in construction, cool and com-



fortable and is perfectly insulated. It may be used on any current, different types being furnished for the Edison and the Westinghouse sockets. It gives a light of fifty candle-power, and does away with the necessity for reflected light.

Its retail price is $6.50.

McDade's Cervical Director.

As an aid in the common operation of packing the uterus with gauze to prevent hemorrhage, this device has much to recommend it. The cut shown illustrates clearly both the nature of the device and the method of use. When the gauze is

being introduced, any ordinary dressing forceps or blunt instrument may be used in pushing the material into the uterus; the jaws of the director close automatically, thus preventing the gauze from being drawn back.

The director retails for $1.25.

An excellent plan is being undertaken by the physicians of Davenport, Ia., to secure medical journals for themselves. Each member of the county society will pay a fee of $5.00, and will submit a list of medical journals, from which a list containing those which have received the greatest number of votes will be made up. The journals, when secured, will be placed on file in the room in the public library devoted to the county medical society.

PROGRESS OF MEDICAL SCIENCE

Supra-Pubic Enucleation of the Prostate.

H. O. Walker (*International Journal of Surgery*, September, 1904), in a paper read before the Wayne County Medical Society, reparts 30 prostatectomies since January 1, 1902, nine of which were supra-pubic operations. He is by no means an advocate of the supra-pubic route to the exclusion of other methods, but selects the operation best adapted to the individual case. He summarizes as follows:

The dangers of a prostatectomy by either method are, first, hemorrhage, which is rare, and about the same in each.

Second, urinary fistula, which is about equal in either method, and in the writer's judgment is often due to too long retention of the drainage tube.

Third, rectal laceration, forming a fistula, is a possibility, yet with care should rarely occur, but is more likely to occur by the perineal route.

Fourth, sepsis, which will of necessity be more liable to occur by the supra-pubic than by the perineal route, yet previous and present antiseptic treatment of a diseased bladder wall will do much toward warding off infection in the former.

Fifth, shock.

Sixth, arteriosclerosis.

Seventh, destruction of sexual power and loss of the power of fecundation which is more likely to follow the perineal operation because of the greater danger of injuring the urethra and ejaculatory ducts. It can be hardly questioned that a very large gland can be better and more safely removed by a supra-pubic prostatectomy, while one of medium size can be left to the personal equation of the operator and his familiarity with the two methods. A gland of a fibrous, flabby, plastic character is best relieved by a perineal prostatotomy. I am, however, inclined to the belief of Belfield that the combined supra-pubic and perineal incision will be the operation of the future. The former, on the one hand, better conserves the safety of the sexual function and power of fecundation, while, on the other hand, the perineal incision will better avert the danger of sepsis.

Milk and Tuberculosis.

J. O. Cobb (*N. Y. Medical Journal*, August 13, 1904), agrees with Koch that milk is not a factor in the etiology of human tuberculosis, and his reasoning is logical. If milk from the tuberculous cow is capable of transmitting disease to the human being the classes and races among whom milk constitutes an essential part of the dietary should be especially subject to the disease, which is not in accordance with the facts regarding the prevalence of tuberculosis.

Surely tuberculosis is a filth disease, affecting the poor rather than the rich because of the difference of environment, but the poor use comparatively little milk as food. The cattle of the Isles of Guernsey and Jersey are free from tuberculosis although the disease is common enough among the people. The Alaskan Indian and the Esquimo, the Chinese, Japanese and Filipinos are extremely subject to consumption, although milk is almost unknown among them as an article of food.

These are facts that cannot be ignored and lightly set aside. To reach a correct

understanding of the causes of the spread of the grim monster, we must lay aside sentiment and come face to face with the truth, and at the bovine infectionist all the above facts are shaken as the red rag of challenge.

Venereal Prophylaxis.

Peterkin (*Medical Sentinel*, October, 1904) makes a strong plea for humanity and common sense instead of idealism, basing his argument upon the following principles which he believes to be fundamental:

1. Venereal diseases are detrimental to the evolving of every individual.

2. The object of venereal prophylaxis is to aid all humanity in its evolutionary advancement.

3. Prostitution and venereal viruses cause venereal diseases.

4. Prostitution has existed always and will continue to do so indefinitely.

5. Every human being possesses the absolute right to make his own morality, and, as a woman is a human being, she has a right to prostitute herself as well as a man.

6. Man does not possess the power to create, control, or destroy eternal organic laws of nature, by means of statutory or constitutional laws of his own creation.

7. Prostitution is dependent for its existence upon an eternal, organic law of nature, essential to life—the sexual instinct that is given to man for two reasons, to perpetuate the species and to rivet the tie between husband and wife, not only by offspring, but by mutual endearment.

8. Venereal viruses are potent instruments in the law of evolution, created by nature as a protective force to defend the law of sexual instinct from transgressions or perversions of its principles. They act by aiding the fit to survive, by destroying or rendering sterile the unfit and the ignorant.

9. The sexual instinct every human being possesses, even in the purest; it is of necessity an alloy, made up, like ourselves, of body and mind, the grosser so influxed with the more ethereal that the one finds its most passionate expression in the fruition of the other.

Poisoning by Wood Alcohol.

Buller and Wood (*Journal A. M. A.*, October 8, 1904), in an exhaustive resumé based upon the study of several hundred cases reach the following conclusions:

1. Methyl, or wood alcohol, in any of is forms, as well as all methylated preparations made from it, are dangerous poisons, menacing both life and eyesight.

2. It is best known to us in its deodorized form as Columbian spirits, cologne spirits, colonial spirits, standard wood spirits, union spirits, eagle spirits, green wood spirits, and a variety of other fluids, and is also used as an adulterant of, and substitute for, grain alcohol in cheap whisky and other alcoholic beverages, not to mention Jamaica ginger, lemon extract and many other essences and flavoring fluids, and in the preparation of many proprietary and patent medicines, witch hazel, domestic liniments, as well as bay rum, cologne water, Florida water and other perfumes.

3. To this date, at least 153 cases of blindness and 122 deaths have resulted from this poison; in all, 275 instances of lost life and eyesight. This total would probably be raised to 400 if a more thorough search were made.

4. The injury to the ocular apparatus consists chiefly of a destructive inflammation of the optic nerve fibers or retinal elements (or both), followed by their atrophy.

5. The symptoms of poisoning are gastrointestinal disturbances, more or less severe, accompanied by abdominal pain, general weakness, nausea, vomiting, vertigo, headache, dilated pupils and blind-

ness. If recovery does not occur, there are marked depression of the heart's action, sighing respiration, cold sweats, delirium, unconsciousness, coma and death.

6. The blindness is bilateral and may set in a few hours after the inhibition of the poison, or it may be delayed for several days. It is generally complete, with a subsequent improvement, and, finally, a relapse into permanent blindness.

7. The diagnosis can hardly be mistaken. Methyl alcohol poisoning presents a picture unlike that of any other intoxication. Acute abdominal distress, followed by blindness, should always awake a suspicion of methyl alcohol poisoning.

8. The prevention of poisoning by this insidious drug can only be brought about by prohibiting the sale of "deodorized" wood alcohol in its forms. The number of deaths may meantime be limited by putting all methylated preparations on the list of poisons, and prosecuting all persons adulterating foods and drinks with it. Labelling it with the notice, "This fluid, taken internally, is likely to produce blindness," will certainly have a deterrent effect.

9. Methyl alcohol intoxication is an example of idiosyncrasy. As in the case of several other poisons, some persons are largely immune so far as permanent damage to the organism is concerned. If ten persons drink, say, four ounces of Columbian spirits within three hours, all will have marked abdominal distress and four will die, two of them becoming blind before death. Six will eventually recover, of whom two will be permanently blind. With still larger doses, the proportion of death and blindness will be greater.

10. Poisoning by inhalation of the fumes of methyl alcohol generally occurs when the exhalations are mixed with rebreathed air, as in varnishing the interior of beer vats, small rooms, etc. It is also highly probable that in susceptible subjects repeated or even single methylated "alcohol rubs" may produce poisonous symptoms, through absorption of the spirit by the skin.

11. The treatment of methyl alcohol intoxication consists chiefly in getting rid of the poison from the stomach and intestines by means of the stomach-pump and rectal injections; stimulants, especially ethyl alcohol, strychnia and coffee; heat to the body and extremities.

12. The treatment of the amaurosis is unsatisfactory. In the early stages pilocarpin and potassium iodid; later, strychnia hypodermically and by the mouth.

A resolution calling for the appointment of a committee of four to constitute a committee of publicity was named by the tuberculosis congress at its meeting in St. Louis on October 5 last. Dr. J. H. Kellogg, of Battle Creek, was appointed chairman of the committee, which was given power to add to its number by enlisting the aid of prominent educators, manufacturers, philanthropists and others who may be able to assist in carrying on a vigorous campaign of education on the subject of the prevention of tuberculosis.

The following officers of the congress were named: President, Dr. F. E. Daniels, of Austin, Tex.; vice-presidents, Drs. J. H. Kellogg, of Battle Creek, Mich., and Dr. John Ferguson, of Toronto, Ont.; secretary, M. M. Smith, of Austin, Tex.; treasurer, Dr. Clark Bell, of New York. The adjournment was made sine die.

At the annual meeting of the Detroit Academy of Medicine, held October 11 last, the following officers were elected: President, Wadsworth Warren; vice-president, Preston M. Hickey; secretary-treasurer, Harrison D. Jenks; director, Justin E. Emerson.

BOOK REVIEWS

The Surgical Treatment of Bright's Disease. By George M. Edebohls, A. M., M. D., LL. D., Professor of the Diseases of Women in the New York Post-Graduate Medical School and Hospital; Consulting Surgeon to St. Francis Hospital, New York, Etc., Etc., Etc. Pages, 320. Price, Cloth, $2.00. Frank F. Lisiecki, Publisher, 9 to 15 Murray St., New York, 1904.

Surgical treatment of chronic Bright's disease was proposed by Dr. Edebohls, and its practice has for some time been earnestly advocated by him. In his present book he makes a report of seventy-two cases which came under his care and underwent operation, and leaves the reader to judge for himself the efficacy of the treatment. The results attained at his hands would seem to furnish abundant evidence in support of his statements as to the value of the operation in certain cases, and Edebohls would be among the first to admit failure.

The text is made up partially of contributions by the author to medical journals since 1899 and as he says: "Are believed to embody with reasonable completeness our present knowledge of the surgical treatment of Bright's disease."

It is, however, to the histories of the seventy-two patients mentioned that the medical profession will probably turn with the greatest interest. After all, results are what we are seeking, and they are shown here. No cases which were operated after the end of 1903 are considered, for the reason that the author does not feel that he is justified in reporting recovered cases until they have been under observation for some time. Nine months represents the shortest period of observation in any of the surviving cases which are reported. Of the total number of cases mentioned, all but three are fully accounted for by Edebohls in his book from the time of operation to the date of going to press, or, in the event of death, to the time of that occurrence. The three missing patients were operated on before the author's first publication, in 1899, and have not been traceable since.

Of the seventy-two cases, thirty-six were males, and a like number females; the ages varied from four and one-half to sixty-seven years. Seven died within two weeks following operation, twenty-two at periods of time more or less remote from operation, three disappeared from further observation, and forty are known to be alive.

Valuable condensed tables are published by the author, showing nature of operation, result and pertinent remarks on each case. Of the twenty-two deaths, Dr. Edebohls makes the statement that none was due to operation. Thirteen died ultimately of chronic nephritis or its complications and only six of these received no benefit of operation. Edebohls concludes his book as follows: "The evidence submitted, in the author's opinion, not alone justifies the surgical treatment of Bright's disease, but establishes surgery as at present the main, if not the only, hope of sufferers from a hitherto incurable malady."

A complete bioliography and a cross-reference index add materially to the use of the book for those who are themselves pursuing investigations along similar lines.

Lectures to General Practitioners on the Diseases of the Stomach and Intestines, as well as the Allied and Resultant Conditions, with Modern Methods of Treatment. By Boardman Reed, M. D., Philadelphia, Pa., Professor of Diseases of the Gastro-Intestinal Tract, Hygiene and Climatology in the De-

partment of Medicine of Temple College, Philadelphia; Attending Physician to the Samaritan Hospital, Etc., Etc., Etc. Illustrated. Pages, 981. Price, Cloth, $5.00 Net. E. B. Treat & Co., Publishers, 241-243 W. 23rd St., New York, 1904.

Comparatively little literature covering this general subject has already been available in a form that satisfied the needs of modern practitioners. As in some other medical matters, we have had to lean more or less on information and expression from foreign sources, and the latest and best of works on the subject published abroad have not yet been put into such shape as to render them available to many American practitioners. Owing to its importance, the general subject is constantly being investigated by trained observers, and valuable discoveries are being made, while new theories which are at least worthy of trial are being presented from time to time. Dr. Reed has not attempted to collect a number of monographs on the subject from the many that he might have drawn on; but he has written his present book with the idea of treating in a single volume the whole general subject, with so much of detail as may be necessary in specific cases. He is abundantly qualified for this work by his long practical experience, his individual studies and his close touch with the latest and most improved methods of instruction.

Dr. Colier Martin has contributed a valuable section on diseases of the rectum and anus, which includes some discussion of the injection method in the treatment of hemorrhoids. Another important and valuable portion of the book is Dr. Reed's gastro-intestinal clinic, which takes up the diagnosis and treatment of all the known diseases of the tract.

Hyde & Montgomery on the Skin. A Practical Treatise on Diseases of the Skin, for the Use of Students and Practitioners. By James Nevins Hyde, M. D., Professor of Dermatology and Venereal Diseases, and Frank H. Montgomery, Associate Professor of Dermatology and Venereal Diseases in Rush Medical College, Chicago. Seventh and Revised Edition. In one Octavo Volume of 938 Pages, with 107 Engravings and 35 Plates in Colors and Monochrome. Cloth, $4.00 Net. Leather, $5.50 Net. Lea Brothers & Co., Publishers, Philadelphia and New York, 1904.

It is like seeing an old and esteemed friend in a new and pleasant guise to pick up this handsome new edition of a standard work. We know its good qualities, and we feel that in the interval that has elapsed since the sixth edition, improvement must have been made. An inspection of the book shows that this is the case; material that reflects opinions and theories of the past time have been largely eliminatd, and the book as it stands is an authoritative exposition of dermatology as it is understood by the most advanced writers and practitioners of the present day.

New subjects have been introduced and new illustrations have been used with good effect. The new subjects treated are: General pathology of the skin, radio-therapy and phototherapy, granulosis rubri nasi, pyroplasmosis hominis, erythema elevatum diutinum, ulcerating granuloma of the pudenda, the psoriasiform dermatoses (parapsoriasis), acrodermatitis perstans, acrodermatitis vegetans and acrodermatitis chronica atrophicans. The subjects of treatment by the Finsen light and the X-rays are carefully written and complete and in general the new treatments that have been sufficiently tested and found to be of value come

in for their share of attention. The thoroughness with which the whole field of investigation has been covered in the work makes it a practically exhaustive exposition of the subject, as much as any one book can. Moreover, thanks to a logical arrangement of the subject-matter, many difficulties of classification are overcome. A number of excellent prescriptions form an important portion of the book.

Von Bergmann's Surgery. A system of Practical Surgery. By Drs. E. von Bergmann, of Berlin, P. von Bruns, of Tübingen, and J. von Miculicz, of Bres'au. Edited by William T. Bull, M. D., Professor of Surgery in the College of Physicians and Surgeons (Columbia University), New York. Complete work now ready, in five imperial octavo volumes, containing 4,220 pages, 1,976 engravings and 102 full-plates in color and monochrome. Sold by subscription only. Per volume, Cloth, $6.00; Leather, $7.00; Half Morocco, $8.50, Net. Volume V just ready. Pages, 789, with 354 engravings, 23 plates. Lea Brothers & Co., Publishers, Philadelphia and New York, 1904.

With this volume the most important system of surgery that has recently been issued, is completed. The original work, in German, has attracted universal attention in Europe, and the translation and revision to which the text was subjected in order to have it conform thoroughly to American needs have been done in a masterly manner. With this collection of books on his shelves, the modern surgeon may rest content for the time being in the knowledge that he has the best available material on his subject at his elbow. They form a complete working library of surgery, especially valuable in the large amount of clinical material included. In addition to this is a carefully selected and well ordered fund of information based on data that are reliable and on the results of careful individual research along special lines. The completion of the series marks the successful termination of a great enterprise, promptly executed, and destined to win the favor of every English-speaking surgeon.

The scope of the last volume is shown as follows: Malformations, injuries and diseases of the pelvis, the anus and rectum, the urethra, the penis; abnormalities, injuries and diseases of the kidneys and ureter, the bladder and prostate, the scrotum, testicles, vas deferens and seminal vesicle, etc.

Manual of Physiological and Clinical Chemistry. By Elias H. Bartley, B. S., M. D., Ph. G., Professor of Chemistry, Toxicology and Pediatrics in the Long Island College Hospital, Etc. Second Edition, Revised and Enlarged. With 47 Illustrations. Pages, 182. Price, Cloth, $1.00 Net. P. Blakiston's Son & Co., Publishers, 1012 Walnut St., Philadelphia, Pa.

Unquestionably there are numerous manuals of chemistry for the use of the medical student, but many of them lose sight of the important matter of practicability. Dr. Bartley's book is practical, with the knowledge that he has gained in twenty years of teaching. He is a man of definite ideas, and they are given definite shape by his practiced pen, with the result that the book which his publishers now present in the second edition covers just about the ground that it ought to, without undue verbiage, and still without omitting those things which it is vital for the medical student to know.

No attempt has been made by the author to take in the wide field of general microscopic diagnosis, for he feels, and properly, that this subject is too wide for consideration in a book with the lim-

its of a manual; he has chosen wisely and has condensed a really large amount of practical suggestion and direction into his text as it stands. The more important general experiments are set down with sufficient detail to make their performance a matter of no great difficulty, and where special details are needed they are supplied in the right place. A number of tables furnish simple and easily grasped hints as to general and specific conclusions from the results of experiments. The book is well illustrated and should have the approval of instructors in seats of medical learning; it is pretty sure to appeal to the students themselves.

Hand-Book of the Anatomy and Diseases of the Eye and Ear. For Students and Practitioners. By D. B. St. John Roosa, M. D., LL. D., Professor of Diseases of the Eye and Ear in the New York Post-Graduate Medical School; formerly President of the New York Academy of Medicine, Etc., and A. Edward Davis, A. M., M. D., Professor of Diseases of the Eye in the New York Post-Graduate School; Fellow of the New York Academy of Medicine. Pages, 300. Price, Extra Cloth, $1.00 Net. F. A. Davis & Co., Publishers, 1914-1916 Cherry St. Philadelphia, Pa., 1904.

An excellent little hand-book on the subject. Its authors have succeeded admirably in giving the reader what he must know, including the essentials and excluding the non-essentials with a fine impartiality. In short, it presents the present state of ophthalmology and otology in such shape as to make it a reliable, if somewhat abbreviated guide. Its subject-matter includes both the matter of treatment of diseases of the eye and the ear and the anatomy of the organs themselves. New points of interest in the accepted methods of treatment are mentioned, together with several suggestions which are still on trial.

It may be stated without much fear of successful contradiction, that every student and practitioner, too, needs a book of this kind. The idea on which it has been built is an excellent one, and the two authors, men of wide experience and reputation, have faithfully carried out the original plan.

Lea's Medical Epitome Series. Toxicology. A Manual for Students and Practitioners. By Edwin Welles Dwight, M. D., Instructor in Legal Medicine, Harvard University. Series Edited by Victor Cox Pedersen, A. M., M. D., Instructor in Surgery and Anaesthetist and Instructor in Anaesthesia at the New York Polyclinic Medical School and Hospital, Etc., Etc. Pages, 293. Price, Cloth $1.00. Lea Brothers & Co., Publishers, Philadelphia and New York.

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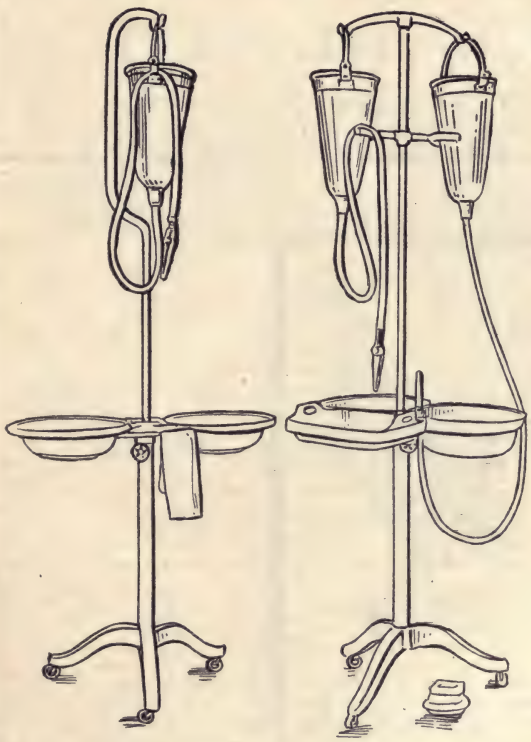

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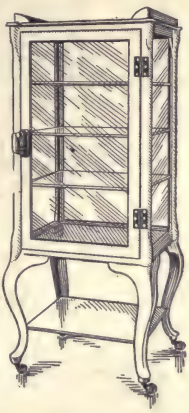

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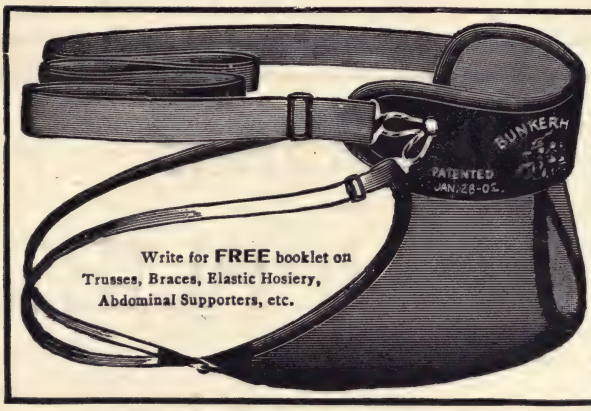

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They feed on thorns and expect to pick roses!

Later, they find they have sown indigestion and are reaping ptomaines.

It's a wonderful laboratory, this human body. But it can't prevent the formation of deadly poisons within its very being.

Indeed, the alimentary tract may be regarded as one great laboratory for the manufacture of dangerous substances. "Biliousness" is a forcible illustration of the formation and the absorption of poisons, due largely to an excessive proteid diet. The nervous symptoms of the dyspeptic are often, but the physiological demonstrations of putrefactive alkaloids.

Appreciating the importance of the command, "Keep the Bowels Open," particularly in the colds, so easily taken at this time of the year, coryza, influenza and allied conditions, Dr. L. P. Hammond of Rome, Ga., recommends "Laxative Antikamnia and Quinine Tablets," the laxative dose of which is two tablets, every two or three hours, as indicated. When a cathartic is desired, administer the tablets as directed and follow with a saline draught next morning, before breakfast. This will hasten peristaltic action and assist in removing, at once, the accumulated fecal matter.

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Pas-Avena, a new soporific, sedative and anodyne. This preparation is introduced as a substitute for the many compounds containing morphine, chloral, bromides and other drugs, none of which are free from objection because of their ultimate effect upon the system. The administration of morphine is always attended with misgiving, since the physician can never be sure that his patient will not become addicted to its use after giving small amounts. Chloral is unreliable and not safe, and the bromides disturb the digestive apparatus and disorganize the nervous system. The profession has long sought for an agent which will induce sleep and relieve pain promptly and positively. Pas-Avena is such a remedy. Its composition is a known quantity and appeals to the physician as a scientific preparation admirably adapted to the purposes for which it is introduced. The pronounced specific action possessed by Pas-Avena as a nerve sedative renders this preparation a most valuable aid in the treatment of insomnia, nervous headaches, convulsions, epilepsy, chorea and all conditions resulting from impaired nerve function. During menstruation, pregnancy, in childbirth and at the climacteric it has proven a valuable aid to the physician in overcoming the pain and distress, yet it does not intefere with the physiological action of these conditions. Pas-Avena is prepared for the use of physicians only. Samples and literature will be sent to physicians on request. Address Avena Pharmacal Co., New York.—(Interstate Medical Journal.)

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Edward Pennock, 3607 Woodland-ave., Philadelphia, Pa., has issued the first edition of his catalogue of optical and other instruments for use in making a medical diagnosis. Mr. Pennock is well-known as a purveyor of supplies of the sort which may be depended upon. His catalogue notes a number of these, and its makeup as a whole is greatly to his credit. Every few months he issues a special bulletin of **second-hand miscroscopes**, cameras, lenses, accessories, etc., which he will gladly send on application, or he will send it regularly to those desiring to receive it. He is agent for the Tallquist Haemoglobin scale, certainly the best device known for observing the percentage of haemoglobin, and just at present he is offering a 1-12 in. oil-immersion lens for $25. An oil-immersion lens of such good quality as this has never before been offered at so low a price.

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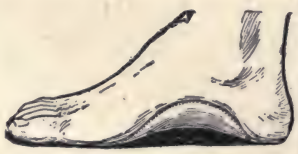

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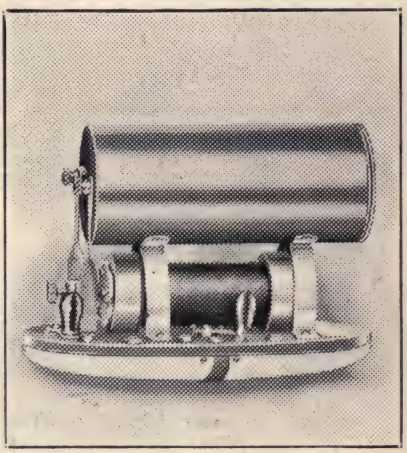

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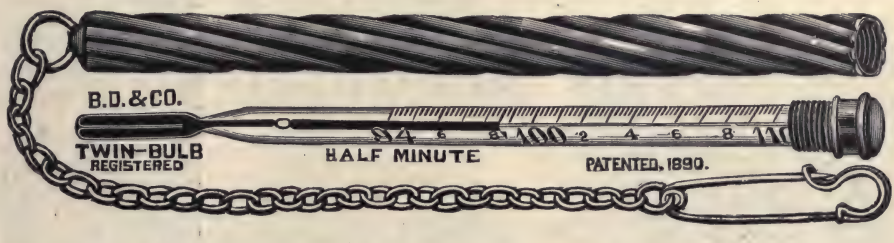

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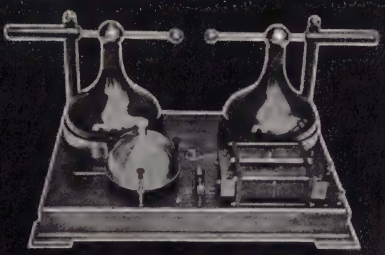

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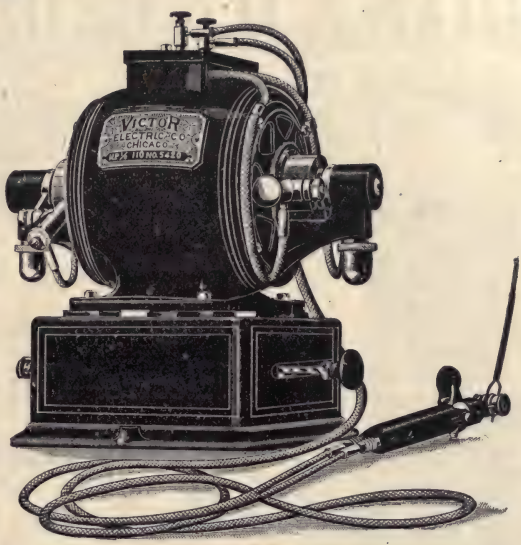

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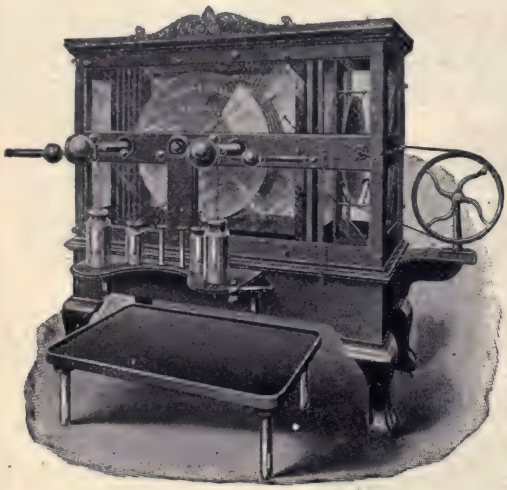

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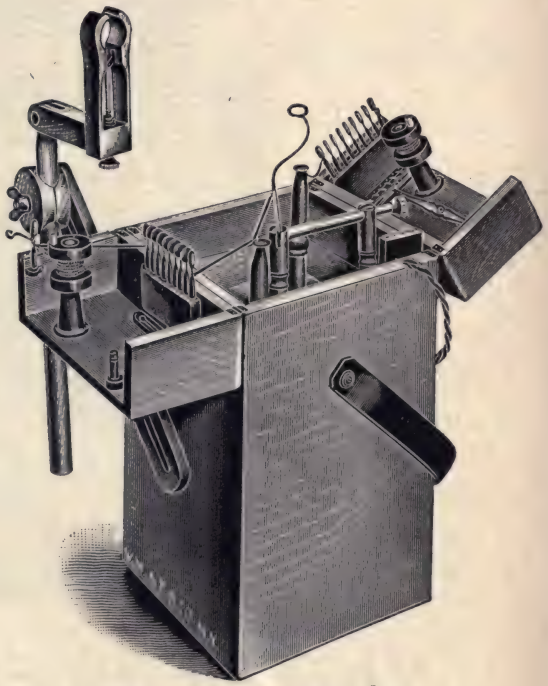

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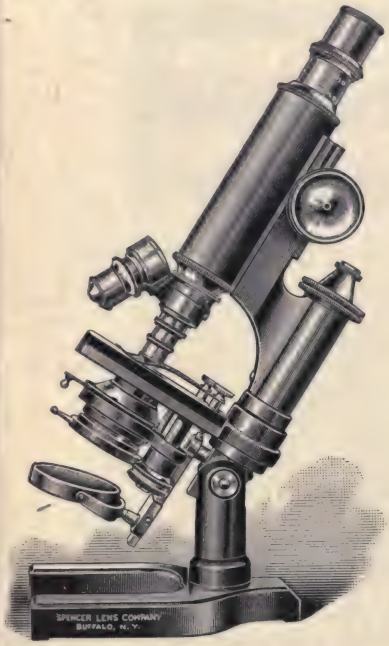

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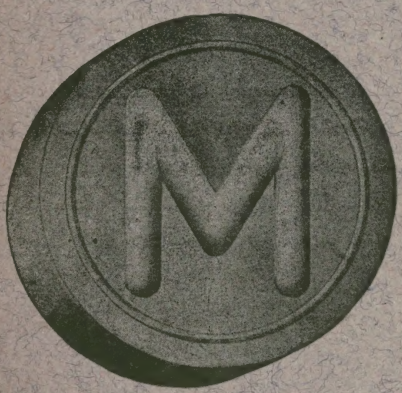

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